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# USSR Report

MILITARY AFFAIRS

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USSR REPORT  
MILITARY AFFAIRS

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## MILITARY POLITICAL ISSUES

### MINISTRY OF DEFENSE, GLAVPU STATEMENT ON SOCIALIST COMPETITION

Moscow KRASNAYA ZVEZDA in Russian 14 Dec 86 p 1

[Article under the rubric "In the USSR Ministry of Defense and the Main Political Directorate of the Soviet Army and Navy": "We Shall Fulfill Decisions of the 27th CPSU Congress and Commemorate the 70th Anniversary of Great October with Selfless Military Labor!"]

[Text] Our homeland is proceeding confidently along the path of accelerated social and economic development and the fundamental reforms outlined at the 27th CPSU Congress. Implementing the party's aims with respect to restructuring the work style and methods, increasing demandingness in all areas and achieving good end results, the Soviet people are working selflessly to meet the targets set in the 12th Five-Year Plan.

The Soviet people need lasting peace and assured security in order to carry out the grand creative plans. Tensions are growing and the arms race is increasing in the world, however, through the fault of reactionary forces of imperialism, primarily the USA. The Washington administration is striving persistently for military superiority over the USSR. This makes it incumbent upon fightingmen of the army and navy to be alert, to maintain a high level of vigilance and combat readiness.

Soviet fightingmen worked vigorously and intensively to accomplish this in the training year just ended. The year's results demonstrate that the course of restructuring taken in the nation and in the Armed Forces is having a beneficial effect on the life and work of the military collectives, and is helping to stimulate their creative potential and their search for new approaches for accomplishing the assigned missions. Certain results have been achieved with respect to intensifying the training process, bringing it closer to actual combat conditions and strengthening military discipline.

As they fulfill decisions coming out of the party congress in the training year which has begun, fightingmen of the army and navy are going to have to reach higher levels in their combat improvement. The task of converting plans and ideas into the energy of practical action will be furthered by the socialist competition vigorously launched in our nation in response to the Appeal of the CPSU Central Committee to the Workers of the Soviet Union: "For the 12th Five-Year Plan--the Inspired, Creative Labor of the Soviet

People!" This appeal from the party has met with a fervent response in fightingmen of the army and navy.

The socialist competition for the 1987 training year was initiated by personnel of missile unit "X," commanded by Lieutenant Colonel N. Ulyanov, the Guards tank regiment commanded by Guards Lieutenant Colonel Yu. Pakhomov, the Guards antiaircraft missile regiment commanded by Guards Lieutenant Colonel V. Soshko, the Guards air regiment commanded by Guards Lieutenant Colonel A. Labkovskiy, and the nuclear-powered submarine commanded by Captain 1st Rank V. Nikolayevskiy. The patriotic actions of those initiating the competition have been discussed by and given the support of the military councils and political directorates of the services of the Armed Forces.

The USSR Ministry of Defense and the Main Political Directorate of the Soviet Army and Navy have approved the commitments and appeals of personnel in the outstanding units, and call upon all of the servicemen to actively join in the socialist competition with the slogan: "We shall fulfill decisions of the 27th CPSU Congress and commemorate the 70th anniversary of Great October with selfless military labor!"

The military councils, commanders, political organs, staffs, party and Komsomol organizations must make the competition serious and purposeful, truly competitive and militant, universally create conditions for the development of initiative and creativity, and direct it toward the achievement of good end results in the training of the troops and naval forces.

Yesterday's results, even the positive ones, can no longer be used as reference points for outlining the new goals and the improvement of combat skills. Accomplishing completely and well the tasks set for the Armed Forces at the 27th CPSU Congress--this is the chief goal and the main guideline in the competition.

Fuller use should be made of the indoctrinational possibilities of the competition for purposes of developing good moral qualities in the personnel, uniting the multinational military collectives, further strengthening military discipline, and developing intolerance of negligence and waste.

The political organs, party and Komsomol organizations must ensure that every Communist and Komsomol member takes an avant-garde role and sets a personal example in the fulfillment of the socialist commitments, that the competition is given extensive publicity, and that progressive experience is promptly and efficiently disseminated.

The USSR Ministry of Defense and the Main Political Directorate of the Soviet Army and Navy express their firm confidence that the fightingmen of all services of the Armed Forces will unanimously support the appeal from the initiators that competition be launched in the new training year for further implementation of decisions coming out of the 27th CPSU Congress and for a fitting reception for the 70th anniversary of Great October, and will commemorate it by achieving good results in the combat and political training.

## MILITARY SCIENCE

### THE CALL OF THE TIMES -- ORGANIZATION AND EXECUTION

Moscow VOYENNIY VESTNIK in Russian No 9, Sep 86 pp 2-5

[Article by General of the Army A. Mayorov, First Deputy Commander-in-Chief of Ground Forces: "The Call of the Times -- Organization and Execution"]

[Text] Further strengthening organization and discipline, one of the components of our military potential and one of the most difficult and critical tasks that the 27th CPSU Congress has assigned the Soviet Armed Forces, is becoming even more urgent. And this is totally understandable. Without this, it is impossible at the present time to achieve a level of force combat readiness that will guarantee that any aggressor will be immediately repulsed.

And this is why commanders, political workers and staff officers must now achieve a high level of organization and execution. It is important that efficiency and close attention, the drive to carry out their own functional responsibilities totally, creatively and with initiative all become the norm in their service activities.

Organization and discipline in a regiment, battalion, artillery battalion, company and battery depend on a number of conditions. First and foremost, the entire life of personnel in the organization must run strictly in accordance with the requirements of combined arms regulations. There is good reason for these regulations being called the laws of military service. Communist Party and Soviet Government policies in the sphere of military construction as well as the basic principles for training and educating personnel have been anchored in these regulations.

Regulations give commanders and political workers specific directions relative to setting up military training and life and, the political, military, moral and legal education of commissioned and warrant officers, sergeants and soldiers. And it is a matter of honor for every chief to strive to have the collective that is subordinate to him maintained in regulatory order. Work in this area must be conducted expediently and on a daily basis using the most diverse forms and methods.

It is possible to get organization and execution only by clearly planning all aspects of the entire life of the subunit or unit. In this case, the

personnel's primary efforts are concentrated in the decisive sectors and areas, time, forces and materials are used efficiently, activities, training and exercises are conducted in a clear manner and program materials are mastered successfully. When units plan military training in a perfunctory manner, exercises are unavoidably divided and disrupted, personnel are pulled away from them, the methodological sequence of the training is violated and there are interruptions in technical and material support. Therefore one should not spare either energy or time for this responsible business. As is known, the plan is developed by the staff with guidance from the commander and is approved by the senior chief. All soldiers must interpret this as a state plan from which there cannot be the slightest divergence. Its punctual accomplishment disciplines people, mobilizes their will and efforts and directs their energies toward the qualitative mastery of training programs.

At the present time the unit commander's method for planning and managing military training is basically the same as planning and organizing a battle. For example the officer must: refine the missions assigned by the senior chief and the requirements in the appropriate manuals; comprehensively evaluate the situation in which these tasks will be accomplished; determine primary missions for himself and plan the most expedient methods for accomplishing them; assign specific missions to subordinates; set up mutual support among the subunits of the arms of service, specialized forces and services; insure that there is material support for all measures.

Many of our commanders operate in this way. At the same time some officers have a simplified understanding of the essence of planning, at times limiting themselves simply to listing the measures that are stipulated in the formalized documents. They do not always consider the specifics of the theater of combat operations, the increased combat capabilities of the forces, the training level of the personnel and the state of the material and technical base. With this approach to training it is impossible to count on drastic improvements in the quality of tactical (tactical-special), marksmanship and technical training and field training as a whole.

The contemporary military-political situation in the world demands that forces increase their level of combat readiness. The armies of the NATO countries have new equipment and their weapons force us to laborious search for effective methods to train and educate our personnel, to train soldiers to take decisive and skillful actions with their weapons and equipment and to clearly accomplish the military training tasks in abbreviated times.

When subunit commanders are not active enough in this, the end result is a reduced level of training for their subordinates. For example, the poor professional and specifically methodological training of some officers leads to reduced effectiveness during tactical and tactical-special exercises, firing and field exercises, marksmanship training and technical and special training. At times these exercises are stereotyped, with weaknesses and simplifications, and they do not achieve their goals.

Special attention must be focused on setting up tank firing and marksmanship training during which soldiers master the art of well-aimed firing. Unfortunately there are still places where this training is clearly being

underrated. For example, people are not concerned about material support, are not setting up target conditions in accordance with the requirements of marksmanship courses and are not considering the individual peculiarities of the students.

Naturally these attempts to substitute coaching for planned training cannot produce positive results. Only by strictly carrying out training plans and programs and observing the basic principles of military pedagogy and psychology can one give soldiers comprehensive knowledge in a purposeful manner, develop the necessary skills and qualities and achieve a high level of coordination in subunits.

It is important that commanders systematically and objectively review their service activities to increase their organization and execution. The main thing is that they be basic, objective and consistent, thoroughly analyze the state of affairs in subordinate subunits, openly talk about both the good and the bad and also encourage the worthy and severely punish the careless.

Meanwhile some commanders, political workers and staff officers do not know the real state of affairs in their own collectives. They are not try to detect the reasons for deficiencies in organizing the training process and persistently eliminate them in a timely manner. Here is one fact that specifically addresses this. The battalion commanded by Major R. Hikishin is considered to be the best in the regiment according to the command and party committee in that regiment. This subunit has long been used as the example when reviewing the results of socialist competition.

But one day the senior chief held graded exercises on basic subjects for the regiment. And it turned out that Major Nikishin's subordinates do not have solid skills in operating with their weapons at night and do not meet the norms.

The battalion commanded by Major V. Demidov achieved higher results, although according to the regimental command it was considered one of the poorer battalions. As opposed to his colleague, Major Demidov showed a daily concern about the effectiveness of training in the platoons and companies and increasing the methodological training of his officers and sergeants. He strived to reach the point where his soldiers totally mastered all the subjects dealing with marksmanship and technical training. It became clear that both the regimental commander and his deputies and also the party committee members had been formalistic in evaluating the officers' work, had used old yardsticks when visiting the subunits and had not gotten personally and deeply involved in the issues of military training and education for personnel and strengthening of discipline.

This style of leadership should be sharply condemned. Today, with the 27th CPSU Congress having determined a clear program for realizing the energy of the plan within the energy of specific practical activities, every chief must thoroughly analyze the state of military and political training in his subunits and the state of military order on a daily basis, must support the



foremost soldiers, assist those who are lagging behind in eliminating their deficiencies in an operational manner and also must show increased exactingness in everything that he does.

Subordinates are not offended when a commander is justly strict. A person who is not trained enough in a professional sense, who does not know the real state of affairs and who is unclear as to what and how he must demand because he is passive in his work is usually not a man of principles. Any officer who walks away when the norms of army life are being violated is not only turning a blind eye towards affairs, but is also, whether he wants to or not, undermining the foundation of military discipline and regulatory order in his subunit and unit. We must increase our demands on such commanders and evaluate such actions as a direct violation of their responsibilities.

An increase in organization and execution in many respects is associated with using the potentials of socialist competition, the real school for politically, militarily and morally educating personnel and for solidifying the military collective. At the present time this competition is taking place in units and subunits under the motto "We will fulfill the decisions of the 27th CPSU Congress and reliably defend the achievements of socialism!" and is to a great degree facilitating an active search for reserves to increase the effectiveness of military training. In the course of this competition the initiative of soldiers is being directed primarily at struggling to attain qualitative indicators, developing training tasks and normatives, training class specialists, mastering integrated specialties, creating a modern material and technical training base, having a careful attitude toward weapons and equipment and indoctrinating soldiers with a high degree of organization and execution.

Unfortunately when people forget about this, they allow formalism, stereotypes and paper creativity, they do a poor job of disseminating the latest experience and they do not mobilize personnel to struggle to achieve the assigned goals. This undermines the fulfillment of their adopted commitments and competition is not effective enough.

It is difficult at times to "cure" those things that are done for appearance's sake and that still exist in places and also the desire to pass off what commanders desire for what they actually have. One still finds cases where the concept and goals of socialist competition are not fully understood. For example, the regiment discussed above has the symptoms of this disease. When the commander and his assistant for political affairs were told that the results of Major Nikishin's battalion indicated that there was a question as to whether the regiment would accomplish the obligations that it had accepted, both officers reacted calmly. They felt that it was no misfortune that someone had not fulfilled his obligations, for others had achieve the highest indicators and in any event the unit was "passing." In other words, as before, the regiment is orienting itself not on the highest indicators in specific subjects and missions, but on "passing."

And things are even worse in determining the foremost personnel in training and the best personnel in the subunits. If one looks at the review list for the training period, one may note that the number of outstanding training

personnel (by percentages), excellent crews and teams and even platoons is about equal in the best and worst subunits. Something must be done to reliably block these and other elements of formalism.

It is now difficult to overestimate the importance of monitoring and checking execution in the life and activities of troops and especially in the process of military and political training. Its primary goal is to provide the successful accomplishment of the assigned goals, to prevent possible errors and to operationally eliminate any deficiencies in work.

V. I. Lenin considered monitoring and inspection the execution as the most important principle of leadership and demanded that both people and the actual execution of business be inspected. The leader of the revolution saw this as the lynchpin of all work and all policies. These requirements apply totally and fully to us, the servicemen.

Well-regulated supervision is the most important method for correctly educating cadres. It guarantees the successful fulfillment of plans, decisions and obligations which have been adopted, and indoctrinates commanders, political workers and staff officers with the desire for organization and exactingness toward themselves and others. Experience shows that the most effective method is one that has the commander personally working with a small group of officers in the subunits and units subordinate to him and resolving all tasks on site.

The most important thing in monitoring is objectively evaluating the state of affairs. Unfortunately there are examples where for various reasons--to include wanting to look as good as possible--commanders and political workers hide deficiencies that they have from senior chiefs, discuss them in general terms and do not determine methods for eliminating them. Such "methods" are faulty and have a negative influence on training and educating officers, warrant officers, sergeants and soldiers.

A correctly organized system of precautionary control over the course of the training and educational process allows an organization to accomplish its training plan in a timely manner and have very effective training for its troops. Control must in no way be limited to the detection of simplifications. Its primary goal is not to allow and to avert lagging, to guarantee the expedient organization of military training and to detect positive, beneficial aspects and integrate them into the policies of all the units and subunits.

The Communist Party and the Soviet Government are showing a high level of trust in military cadres. But they are holding us strictly responsible. We must answer this trust with our work, by increasing our efforts in work, with a creative attitude toward accomplishing our service duties and with excellent results in training and educating soldiers. We should decisively increase our demands on all cadres, put their activities under the most severe control and put execution verification in proper adjustment.

Purposeful party and political work has been called upon to assist the successful completion of tasks in indoctrinating personnel with a feeling for

organization and execution. We must persistently indoctrinate all servicemen with high political, business and moral qualities and with a feeling of personal responsibility for the assigned task. Those commanders, political workers and secretaries of party committees and local party organizations who take a personal interest in training and educating subordinates and who find "hot" spots in military training in a timely manner so that they can apply their efforts there, are operating in the correct manner.

It is advisable to subject the issues of organization, execution and discipline to discussion more often at party and Komsomol meetings and to make more active use of such an effective form of working with people as listening to communists and Komsomol members report on the accomplishment of their service obligations, on increasing their military and political knowledge and on taking part in political and indoctrinational work.

The tasks of increasing organization, discipline, order and execution at all levels and in all areas and closely combining the efforts of commanders, political workers and staff officers as well as party and Komsomol organizations to strengthen these areas are being pushed ever persistently forward on today's agenda. The successful realization of these tasks will allow a sharp increase in troop training effectiveness and quality and will increase our combat readiness to the level equal to the demands of the 27th CPSU Congress and the USSR Ministry of Defense.

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## ARMED FORCES

### COMMAND, CONTROL: PROBLEM OF 'SUBJECTIVE INFORMATION'

Moscow KRASNAYA ZVEZDA in Russian 11 Dec 86 p 2

[Interview with Lt Gen N. Suraykin, district chief of staff, by Lt Col A. Ladin, KRASNAYA ZVEZDA correspondent, under the rubric "Work Time and Style": "The Reliability of Information"; first two paragraphs are KRASNAYA ZVEZDA introduction]

[Text] The successful accomplishment of our plans and tasks, 27th party congress documents stress, is inseparably tied to the improvement of control. The development and adoption of decisions (orders, instructions, directives) is its most important function in any area, including the military. It is perfectly clear that the effectiveness of control depends in great part on the reliability, the objectivity and the timeliness of the information on the basis of which the decision is made.

Lieutenant General N. Suraykin, district chief of staff, tells in an interview with Lieutenant Colonel A. Ladin, our correspondent, how control of the combat training in the Red Banner Central Asian Military District is being made more effective on the basis of complete and reliable information.

[Question] Comrade Lieutenant General, we know how much harm can be done to combat readiness by even a slight lack of objectivity, insignificant at first glance, in information on the situation at the sites. The June 1986 Plenum of the CPSU Central Committee made the point sharply and from a standpoint of principle that we must conduct an uncompromising struggle against non-objective reports and embellishment, that the half-truth and the lie pervert the mind and deform the personality, and prevent us from deriving realistic conclusions and assessments. I would like to begin our talk with the objectivity of information as the most important element in effective command and control. In your view, what are the specific ways to overcome negative occurrences in this area?

[Answer] Any command and control agency, including headquarters, cannot count on success in its work if it utilizes distorted or imprecise information or information not received in time. Only personal work in the forces and a precise and efficient system for obtaining and verifying essential information can give the district commander and staff a constant knowledge of the actual state of affairs in subordinate formations, units

and subunits. I would say that verification of the incoming information and monitoring the execution of orders and instructions, directives and directions in the units is the most important way to overcome deficiencies in the information area. When those in charge at lower levels feel the demanding and attentive observation of the commander or chief, and sense that he is constantly there to help them, they--and all servicemen in general--develop a sense of responsibility for the assigned job and demandingness with respect to the results of their work.

[Question] But one sometimes sees a situation in which such a system seems to be in existence and operating, and the reliability of the information is being monitored, while nonobjectivity and embellishment of the situation have not been eliminated.

[Answer] Let us ask ourselves why this happens. I recall by way of an example an incident involving the tank company in which Major A. Panasyuk is chief of staff. The regiment had no shortage of verifiers, so to speak. Representatives of division headquarters looked in particularly frequently. But specifically, where did they go? Most frequently to the offices of the regimental commander and the chiefs of branches of troops and services. They requested the necessary information, copied down facts and figures from plans, reports and records in folders, and then rushed back to their own offices without doubting or verifying anything.

Verifiers such as these also helped their subordinates with their "paperwork" methods. They taught them to fill out attractively and embellish all sorts of reports and to sweat over lists and summaries of information which no one needed.

This sort of monitoring, this sort of verification and assistance, if it can be called that, were to the liking of some people in the regiment. And then, as a result of creative paperwork, we had reports signed by Major Panasyuk, chief of staff, indicating that an assembly of subunit commanders was conducted, although it was not. An entire folder of plans, synopses and faked records with the same sort of faked evaluations was assembled and presented to division headquarters as information on busy and creative work being done. It verified the paperwork and not the work itself, made checkmarks in its documents, and sent the information to district headquarters.

And so we have a situation in which night firing exercises were not conducted, but people reported that they were operating according to the combat and political training plan. They did not complete the tasks involved in the commanders' training, but everyone received good evaluations in the logs. And so, at the end of the training year it appeared that everyone in the unit--from the soldier to the regimental commander--was prepared to pass a rigorous test. Not until the district staff verified all of this "documentation," did it become known that much of it did not conform to the reality, that the formation staff did not know the real state of affairs in the regiment.

[Question] Then the nonobjective information resulted from lack of conscientiousness on the part of certain officers in the regiment and at formation headquarters?

[Answer] Yes, certain people in charge allowed nonobjectivity, to put it mildly, in the information, and the verifiers committed gross infractions and distortions of the principles and standards governing inspections, monitoring and the rendering of assistance. Instead of working at the range, the firing ground or the tank training facility, the verifiers spent most of the time in staff offices, working not with people but with paper.

The fruits of this work were a bitter lesson for all of us. The final exam showed that many subunits were not at a very high level.

Let me say right off that those guilty of the sham were severely punished. We also had a discussion based on principle here at district headquarters and at a party meeting of the combat training directorate. The fact was rightly underscored also that staff and directorate officers designated as verifiers are frequently forced to perform the tasks for those specifically responsible for performing them. This occurs because people are sometimes appointed to positions of responsibility in the units, who are incapable of performing the job successfully and with initiative, mobilizing and uniting the cadres around them. Such leaders are the ones who generate embellishment [of the situation] or even sham in an attempt to cover up their weakness with unjustified reports and distorted information.

We remove the dishonest, disorganized and those lacking initiative who accidentally end up in positions of leadership. Specifically, Lieutenant Colonel P. Grinevich, commander of a combat engineer battalion, and certain other officers were relieved of their positions. KRASNAYA ZVEZDA wrote about the Grinevich case.

[Question] So strict demandingness of those individuals who have compromised themselves with a lack of objectivity is also one means of enhancing the reliability of information. What other ways are used?

[Answer] Strict demandingness is an essential thing, of course. However, we place the main stress on the selection of cadres measuring up to the contemporary demands, on their training and indoctrination. The party has assigned us intensive tasks. Naturally, persistent, hard-working people with will and initiative are needed to carry them out. We support such people, teach and indoctrinate them. Everything does not come to all of them at once, of course. There are failures. They must report everything honestly and straightforwardly inform their senior chiefs, however. This is the way the matter is put today. Only then, after all, can ways rapidly be found to correct shortcomings.

We regard teaching the cadres the art of singling out the chief and most important things from the highly diverse life and training of the troops as a considerable reserve for improving the quality of information. Take progressive experience, for example. Far from every report or dispatch contains information reflecting progressive techniques in the training and indoctrination of the personnel or some beneficial initiative. Then one looks into the situation and finds that they exist. When one asks why

higher headquarters was not informed, the answer is silence or, at best, the justification that it was not considered to be the main thing. But why not? After all, we are constantly saying that everything new and progressive must be spotted and approved. If this is not done, before you know it, there is a scarcity of positive and interesting examples from the life of the troops.

This occurs in part because the higher headquarters also frequently consider information on progressive experience not to be the main thing, and do not always require it. Accordingly, the lower-level commanders and staffs treat it in a formal manner and consider it to be secondary. Life and combat training experience tell us that progressive experience must be included in information coming in from the units, must be accumulated and studied at the headquarters and then, checked and solidified, introduced in other units.

There are many examples which confirm this fact. I recall a letter received at district headquarters from a motor vehicle unit, which told about poor training of specialists in one of the DOSAAF training organizations. This was verified and confirmed. The situation was rapidly rectified. The district headquarters had a vast amount of information on the experience of outstanding motor vehicle schools--the Tokmak school, among others. Those lagging behind were provided with this know-how, and their performance soon began to improve.

An intelligible and well-thought-out report from the commander, prepared jointly with the staff and replete with specific facts, continues to be an important source of useful and valuable information. It does not necessarily have to be a document of many pages. It can be a brief telegram or a telephone call. We have diverse means of communication today. We just need to know how to use them skillfully, to develop in ourselves efficiency, a sense of obligation and analytical thinking.

Another channel of information are the reports of district staff and directorate officers who work in the forces as members of groups or verification commissions, or who independently do monitoring work and provide assistance on the spot. We particularly value those people who are capable not just of discovering shortcomings, but of revealing their causes and of making changes for the better at the site. The more competent and energetic officers with initiative and capable of thinking on the large scale there are at headquarters, the greater is its competence and its ability to carry out the missions assigned by the commander. We do not hastily advance a candidate to staff work, remembering V.I. Lenin's well-known instruction to be cautious and patient in testing and identifying real organizers, people with sober minds and practical astuteness, people who combine devotion to socialism with the ability to get the work firmly and smoothly in hand, without fuss (even despite confusion and fuss).

[Question] But are you succeeding in avoiding errors in the work performed with the cadres?

[Answer] Unfortunately, not always. Some commanders and chiefs close their eyes to the fact that untested people who just happen to be there are sometimes recommended to them, people who thirst for rapid promotion but lack the qualities essential for staff work.

It is my profound conviction, that in the course of the restructuring we must thoroughly resolve the problem of strengthening and renewing the staffs at all levels with mature, ideologically strong and well-trained cadres. We also need to invigorate the work of commanders, political organs and party organizations with respect to developing the personnel for command and control agencies.

[Question] One frequently hears complaints about the abundance of documents which the staffs have to "digest," complaints of overloading of information channels and about timidity in introducing into staff operations modern automation equipment, electronic computers, and various devices with great versatility. What can you say about this?

[Answer] The criticism is justified. We need to set more rigid demands with respect to the procedure for transmitting information, increase responsibility for observing the priority message procedure, and to make fuller use of official forms. And we are doing this. This is not enough, however. There is an acute need to reduce the volume of information by singling out the main, the most valuable and essential items. The main factor, the human factor, is not being fully used by far for successfully resolving the problem. The professional caliber, the level of training, the analytical level and the conscientiousness of staff chiefs and officers and their subordinates fall considerably short of the contemporary requirements in some places.

The deficiencies will not be corrected with strong will or orders alone, however. New things need to be taught--even to those who would appear to be highly skilled specialists, who have graduated from military academies and have considerable length of service in staff work. This is necessitated by the continuing improvement of our Armed Forces, by the increasing complexity of the missions and by the changes brought about in the troops by scientific and technological progress. People have been and continue to be the crucial factor with respect to further improving the combat readiness of the troops. Naturally, the effectiveness of those in charge, of the entire system of command and control agencies depends upon the completeness and reliability of all the information fed to those agencies.

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## GROUND FORCES

### MOVEMENT IN MOUNTAINOUS, DESERT TERRAIN DISCUSSED

Moscow TEKHNKA I VOORUZHENIYE in Russian No 12, Dec 86 pp 18-19

[Article by Lieutenant-Colonel A. Aboronov, special correspondent: "March in Mountainous and Desert Terrains"]

[Text] Movement in mountainous desert terrain has its own specific features. At times, situations are possible which briefings and manuals cannot completely predict. In order to accomplish a march successfully in these complicated conditions, it is important to have been able to assimilate, not only one's own experience, but the experience of others. Further, it is absolutely necessary to know thoroughly and utilize fully the capabilities of the fighting equipment. It is, therefore, completely normal, that the leadership and Party organization of the Red Banner Central Asian Military District Decorated Guards unit in which Guards Lieutenant-Colonel A. Kosyakov serves, gives unabated attention to matters of technical and special training for the personnel, and movement training for the drivers and driver-mechanics.

The problems of mastering new equipment and raising the level of preparedness for a march are solved during the course of technical and special training. In theoretical studies most attention is devoted to the study of equipment, and interactions of systems and mechanisms of motor-transport vehicles, tanks, and basic vehicles. In practical training most attention is given to driving and the elimination of defects during the course of a march.

A large amount of attention is given to driver training. Closely supervised driver training is organized with the drivers and driver-mechanics who are newly-arrived in the regiment. This training permits the evaluation of the level of the soldier's training and the determination of which direction it is necessary to carry out individual work with each of them. Special significance is attached to this in the regiment.

Here, this principal is strictly followed: each commander instructs his own subordinates. In addition, each sub-unit commander can also always count on the qualified methods help of a specialist--the commander's assistant for technical matters, as well as from officers of the motor-transport and armor services. They also conduct training, but on more complex subjects.

In practical studies, during exercises provided for by the vehicle driving course, special attention is given to the specifics of executing various methods of handling a motor vehicle (tank, BTR, BMP, SAU, ZSU) [tank, armored personnel carrier, infantry combat vehicle, self-propelled artillery, self-propelled AA artillery in mountainous, desert conditions. Drivers and driver-mechanics learn how to maneuver on mountain roads, change gears before climbing steep upgrades, they learn the use of combined braking methods on long downgrades, and how to cross areas of shifting sand, salt flats, etc.

After the young soldiers acquire a solid enough experience in handling motor transport vehicles in daylight, they switch to night training. At first, the drivers learn how to use various lighted instruments on circular tracks. Then, they are trained in accomplishing limited journeys in vehicles whose headlights have light-masking attachments.

The concluding stage of training is driving transport vehicles day and night in column formation, moreover, in columns made up of a single type of equipment (wheeled or tracked) as well as in columns of mixed equipment. Since BTRs, BMPs, and ZSUs are used when necessary as battle outpost vehicles for motor-transport columns, their driver-mechanics must know how to drive their vehicles in such columns.

Problems of preparation for movement are also worked out in any field exercise in which equipment is moved from the vehicle park. For example, while enroute to the training grounds, personnel take part in the exercise setting. Moreover the commanders use signals to guide and direct the subunits during the movement.

In complex tactical-special training exercises, detachments and crews gain experience servicing and repairing fighting vehicles: they replace disabled assemblies in field conditions, fill equipment with fuel and oil, and become familiar with self-recovery equipment and methods. From among drivers and driver-mechanics appear reliable helpers. Because of this, faster elimination of defects which appear en route and higher quality inspections of the motor transport vehicles at the halts is possible.

Equipment must be ready at all times for movement and use in combat. This is not forgotten in the regiment and scheduled maintenance is always carried out with high quality. Additionally, when an impending deployment to the field is known about ahead of time, additional measures are carried out.

If time allows, the equipment is once again thoroughly examined. The entrenching tool, self-recovery gear, and tow line are checked; canisters of water and boxes of sand are mounted on the vehicle. All types of transport equipment are provided with increased cross-country capability and safety equipment in mountains and deserts.

Prior to movement, detachment commanders, crew commanders, drivers and driver-mechanics are thoroughly briefed. They are reminded of the rules of crossing areas of difficult terrain and operating their equipment in mountainous desert terrain. Attention is paid to monitoring engine heat conditions, and, at each halt, thoroughly examining the tires, tracks, suspension, etc.



It is well known that at high altitudes the fuel/air mixture becomes too rich and fuel consumption increases. Therefore, prior to long-distance movement in high mountain conditions (1000 meters or more), spark plug and breaker point gaps are checked and cleaned of combustion deposits. If the movement is to take place at elevations of 2000 meters or more, then the spark advance angle is advanced by one or two octane correction graduations.

The timing of the fuel injectors on diesel engines is advanced by two to three degrees. In order to ensure the best possible conditions for air supply to the engine's carburation system, the air cleaners are thoroughly cleaned and washed. Dirty air cleaner casings can cause a decrease in engine power, which is also reduced because of altitude.

Prior to crossing desert areas the cooling system sealing, water pump condition, ventilators and condition of the filters are all thoroughly checked.

If movement across shifting sand is envisioned, tracked vehicles are put at the head of the column. In conditions where too much dust arises, it is best to take them by a route parallel to, and downwind from, the main movement route. Whenever possible, a column is made up of all the same type of vehicle.

On weakly consolidated sands, an attempt is made to have only one vehicle (at most, two or three) pass over a single track, and not the whole column. Otherwise the last vehicles will be towed. Weakly consolidated sands are crossed at a speed of not less than five kilometers per hour, and during movement across stoney ground--20 kilometers per hour. In dry still weather, or when there are headwinds, the distance between vehicles is increased to 100 to 150 meters.

Problems of technical support to the march are thought out in detail. In particular the order of advance along the route, and the work of the technical support echelon--checking and servicing vehicles and providing assistance to drivers and driver-mechanics--are determined.

With this in mind, the composition of each individual column usually includes technical support and repair vehicles, one or two tracked or wheeled prime movers with towing equipment, and fuel supply vehicles. This group of vehicles follows at the tail of the column, but following it are the battle outpost vehicles (BTRs or BMPs).

The task of the technical maintenance echelon is to determine the reason for a vehicle stoppage, render the necessary assistance, or issue spare parts for the repair of the discovered defect. A prime mover is allocated to each subunit in order to evacuate, where possible, a stopped vehicle to a halt.

At the end of the preparatory work, subunit commanders personally ascertain the condition and reliability of the operating equipment and, if time permits, conduct an inspection parade of the personnel and fighting equipment. They check personal gear, the availability and condition of arms and ammunition, NBC defense equipment, and the availability of emergency stores. Subunit



commanders check the troops' knowledge of the combat mission, the route, the established signals, and the rules of driving through difficult parts of the route. During the march, they provide timely warning to the drivers about the route characteristics (for example, the steepness and length of downgrades, sharp hidden turns etc.) For this they thoroughly study the route beforehand using a map or schematic provided by engineer reconnaissance.

During the approach to tunnels, the order is given to don gas masks or to keep them at the ready. In the case of a column stoppage inside a tunnel, all drivers immediately turn off their engines, and the defective vehicle is taken in tow. After that, movement recommences. Measures for guarding and defending the approaches to the tunnel are also taken.

Increased security is also established at halts. As a rule it is located on nearby high ground, at exits from ravines etc. Personnel--and every soldier is disciplined in this from his first days of service in the regiment--rest with their weapons, fully ready to repel enemy attacks from the air or on the ground. They carry their weapons on their backs while servicing equipment. In areas of long halts and day rests, slit trenches, emplacements and other simple types of cover are prepared. In each subunit, one or two vehicles are assigned watch-standing duty.

At each halt, subunit commanders and drivers thoroughly check the condition of the running gear base and the towing equipment. Defects which appear are immediately corrected by the detachments or crews, or with the help of repair personnel.

In order not to slow the pace of the march, if it is not possible to repair the vehicle quickly, it is towed to the following halt where a repair shop is partially or fully deployed.

All around, in-depth preparation for movement, and tight discipline during the march permit strict adherence to the column movement schedule and arrival at the intended point exactly in the designated time period.

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## GROUND FORCES

### HELICOPTERS OVER THE BATTLEFIELD

Moscow VOYENNY VESTNIK in Russian No 9, Sep 86 pp 13-15

[Article in the "Theory and Practice of Combined Arms Battle" section by Major R. Rafikov, Baltic Military District: "Helicopters Over The Battlefield"]

[Text] It is very likely that there are no tactical exercises, beginning at battalion level and higher, that take place without the combined arms forces being reinforced with combat helicopters. Motor riflemen and tankers have already become accustomed to this. Many of them such as battalion commanders Lieutenant Colonel G. Tumak and Captain V. Petrov have learned to use helicopter subunits skillfully to resolve military training missions.

It is fair to say that modern helicopters, with their weapons and the technique for their combat employment, are similar to the famous front-line IL-2 ground attack aircraft from the Great Patriotic War period. Veterans say that the mere appearance of even a single flight of these aircraft over the battlefield inspired our soldiers and gave them strength and confidence and terrified the fascist warriors. There was good reason for those ground attack aircraft being christened "Black Death" and "Flying Tanks."

Motor riflemen and tankers of today affectionately call us helicopter pilots "Aerial Cavalry." And there is certainly logic in this.

In my day I served as an air traffic controller in a subunit of the Limited Contingent of Soviet Forces in the Democratic Republic of Afghanistan. I had occasion to take part in tactical training that took place under conditions that were as close as possible to combat. In addition, there were many instances during the course of training where we had to support combined arms subunits who were being attacked by large bands of dushman, the enemy of the Afghan revolution. And I must stress that we were always successful when there was close cooperation between the combined arms and helicopter subunits. When helicopters are in the hands of a skillful combined arms commander, they are an excellent fire support asset for resolving the most diverse missions, especially in the mountains.

I now serve in a helicopter unit in the Baltic Military District. And as before, I control combat helicopters during tactical training with motorized rifle and tank subunits. During this training helicopters fly missions to

destroy enemy objectives (primarily mobile) both at the forward edge and in tactical depth, they support tactical airborne drops, support their combat operations and so forth. They fly these aerial support missions either according to a schedule or at the request of combined arms commanders.

When flying these missions, as a rule helicopters operate in front of and on the flanks of attacking forces. During tactical live-fire exercises they also operate under the trajectory of our own rounds.

Combat helicopters are a mobile means for increasing the fire power of combined arms subunits. They are essentially all-weather, able to take off from almost any field location in difficult climatic conditions and suddenly appear over the target.

Recently during a battalion tactical exercise I observed helicopter gunships making a training anti-tank attack. It was an impressive scene. Initially the lead and rear tanks in the column were "knocked out of action" and stopped. The swamp kept the others from leaving the road and after two subsequent combat runs the "enemy" reserve was for all intents and purposes knocked out of action. And then I involuntarily remembered an episode that Hero of the Soviet Union Marshal of Aviation S. Rudenko had cited in one of his articles.

This took place in February 1944 when a large group of fascist forces had been surrounded near Korsan-Shevchenkovskiy. Hitler sent a tank army to extract them. We transported ammunition to our anti-tank subunits, but were not able to reestablish a reserve. The Red Army Air Force Commander, Marshal of Aviation A. Novikov, was called to Moscow to see Stalin and this is the conversation that they had.

The Supreme Commander Commander-in-Chief asked, "Aleksandr Aleksandrovich, is it possible for aviation to stop tanks?"

"It is possible," answered Novikov.

"Then don't waste time. Send them to the front immediately..."

Novikov decided to use slow-flying aircraft against the tanks. On 16 February the first flight (91 airplanes) took off and by the end of the day 150 fascist tanks had been knocked out of action.

When mulling over this fact, you will come to the conclusion that today's combat helicopters have still not had their final say in the battle against enemy tanks and other dangerous targets. And this is why it is so important to control these assets skillfully and also to establish mutual support between them, on the one hand, and the motorized rifle and tank subunits on the other.

I will note that in the overwhelming majority of cases we find that combined arms commanders are totally knowledgeable and it is easy to find a common language with them. It is a pleasure when they are competent, have the knowledge to assign us missions and are concerned about safety measures. I

will use the example of the joint work between air traffic controller Captain B. Sukhanov and Captain Petrov, the tank battalion commander who was operating as an advance guard at night. The battalion commander called the air traffic controller in to organize the battle on-site. This gave him the chance to orient himself quickly to the tactical situation, introduce Captain V. Galiulin's lead strike force and then introduce the commander of the illumination helicopters, Major Yu. Nikishin, the deputy squadron commander.

As a result, the helicopter pilots made a direct hit on the "enemy's" main armored targets on the forward edge and supported a covert penetration by the advance party's reconnaissance and advance party into the depths of the enemy's defense. The commander clearly coordinated the actions of the helicopters, tanks and artillery. An accurate strike was also made against the defenders' counterattacking battalion.

It is rare, but we still run into cases where we have difficulty in finding a common language with combined arms commanders, and both sides are obviously at fault. It turns out that the commanders for whom the helicopters are operating do not know the fundamentals of the combat employment of helicopters and the helicopter commanders do not know the tactics of combined arms battle. Thus paradoxical situations arise. I once presented myself to the battalion commander and without even hearing me out he said, "Give me a report on which targets you will destroy in front of the battalion attack."

The very fact that he asked for such a report was incorrect. The combined arms commander assigns targets to the air traffic controller. It is another thing to consult with an expert to determine which targets should be destroyed by helicopters after the commander has indicated which targets are to be destroyed by aviation.

We have military training plans, just as there are in motorized rifle and tank units. These plans indicate the times for conducting regimental and battalion tactical exercises. But there are times when the request for aviation resources is submitted only days before the exercise. Of course, this does not allow aviation time to get well prepared for the military work, to refine their missions, evaluate the situation and make expedient decisions.

And there are other misunderstandings. For example we got a request to destroy an "enemy" that was deploying for a counterattack. The battalion commander assigns a mission to the helicopter subunit, but this is often done without considering what kind of situation and what state of combat readiness the combat helicopters are in at that given moment. They could be in an alert area, at forward deployed fields or at their basing airfield. And the flight times to the planned targets would be different because of these situations. There are times when it would be better to use artillery and other fire support assets, and not helicopters, to attack targets.

And here is a question that upsets us. The Great Patriotic War gives us many vivid examples where strikes were made against our own forces because aviators were not properly oriented, targets for the ground attack aircraft were marked by unqualified personnel or the forward edge of our forces was not marked.

Unfortunately some of the conditions that could lead to this being repeated still exist. Some battalion commanders are very unwilling to mark their combat formations. And this is especially important when flying combat missions at night and under other conditions causing limited visibility.

And what must we do to make the control of helicopter and combined arms subunits more strict and flexible?

There is an urgent need to get aviation specialists to talk with regimental and battalion commanders during command exercises or in commander's meetings. In my opinion, the present planning autonomy that commanders at these levels have must be eliminated for the sake of increasing the level of knowledge that aviation experts have in conducting combined arms battles. And we must certainly cover more combined arms tactics during helicopter aviation exercises because some helicopter crews know little about combined arms tactics.

And finally the relative number of missions that combat helicopters resolve on the battlefield is increasing from day to day. Problems arise which could be settled much easier if combined arms commanders more actively studied the operational tactics used by helicopter subunits.

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## GROUND FORCES

### NIGHT TRAINING FOR ARTILLERY PERSONNEL

Moscow VOYENNIY VESTNIK in Russian No 9, Sep 86 pp 57-59

[Article in the "Rockets and Artillery" section by Colonel General V. Mikhalkin, Commander of Ground Force Rocket Forces and Artillery: "Night Training for Artillerymen"]

[Text] Maintaining constant combat operations day and night is the most important principle of contemporary combined arms battle. Strictly adhering to this principle allows one to maintain the initiative, bind the enemy to his will and gain victory over him.

As the experience of the Great Patriotic War shows, the relative share of night battles has grown constantly not only at the level of individual subunits and units as envisioned in military regulations, but also at the major unit level. Whereas at the beginning of the war night subunit and unit operations were conducted only in specific cases, such as at the battles near Kryukov and Mikhaylov in the winter of 1941, later entire corps carried out combat missions during the hours of darkness. The operations to liberate Kharkov, Zaporozhe and Kiev in 1943 were characteristic of this. During the last stage of the war even frontal operations began at night to achieve surprise. An example of this was the Berlin Operation where the 1st Belorussian Front began the offensive on 16 April 1945 two hours before dawn. The attack was preceded by a 20-minute artillery preparation.

A successful attack is the result of careful training of personnel, bold, decisive and well-planned actions by the subunits of all arms of service, reliable fire support, comprehensive combat and illumination support and stable command and control.

Because our army was equipped with new weapons and various types of night vision devices in the post-war period, our force's ability to resolve missions at night was significantly broadened. Therefore very serious attention is being focused on night training for personnel. No less than 30 percent of the training time is allocated to night training. This is most effectively used in rocket forces and artillery in the Transbaykal, Far East and other Military Districts. They have made significant achievements in night training for

subunits and units. But in the Baltic Military District and the GSFG [Group of Soviet Forces in Germany] there are still deficiencies in the practice of teaching the personnel in some subunits the art of conducting combat operations during times of darkness.

What does the successful resolution of artillery missions at night depend on? First, it depends on the level of professional training that the commanders have, their ability to control subunit fire at night, take measures to train personnel, coordinate missions designed to destroy the enemy and provide illumination for motorized rifle and tank subunit operations. Therefore the training of artillery officers is the deciding factor in the ability of units and subunits to conduct combat operations at night. During the course of exercises and training these officers must learn to fire when the target is only periodically illuminated, to determine the number of weapons that must be used and the expenditure of illumination rounds necessary to reconnoiter targets, to illuminate (blind) enemy lines and objectives and also to accomplish these missions in a timely manner.

The artillery subunit inventory has recently acquired a number of devices, including some which have expanded the capabilities of conducting night reconnaissance. One of the most important tasks for artillerymen is to learn to master these devices. However we should caution commanders against attempts to resolve all missions only through the use of such devices. For example, the extensive use of quantum range-finders has led to less attention being paid to cross-observation, especially when reconnoitering objectives that are visible only for a short time (during shell bursts). This method has significantly increased the reliability of night reconnaissance, even more so that it is now also possible to determine accurately and quickly the coordinates of command and observation posts and orient instruments on them by using command vehicle systems. This in combination with stable radio communications allows an artillery battalion to deploy a system of cross-observation posts.

Specialized training for firing subunits is very important for successful night operations. Timeliness and accuracy in accomplishing missions depend to a great deal on the personnel's ability to operate at night, to calculate firing positions accurately and orient weapons and instruments and prepare them and the ammunition for firing. And we must not forget about artillery reconnaissance groups. We must persistently teach them to select firing positions, routes of movement and so forth, correctly and rapidly.

The development of skills in getting oriented in any terrain at night, the ability of every specialist to accomplish his own responsibilities competently and the ability to suppress fatigue and maintain a high level of efficiency are becoming a progressively more important part of the individual training for officers, sergeants and soldiers who operating on the battlefield at night. The advent of new equipment is forcing all personnel in artillery subunits to be able to operate navigation equipment, night vision and driving instruments and other devices for improving night vision.

The highest form used to train artillerymen to operate in modern battle is the tactical exercise and specifically the live-fire combined arms exercise.



During such an exercise battery, artillery battalion and regiment coordination is improved, officers develop skills in setting up and maintaining constant cooperation with motor riflemen and tankers, coordination which is, by the way, much more difficult at night. Artillery subunits usually make a move during these exercises, move out to the vicinity of the firing positions and deploy into battle formation and perform a number of operations to prepare for night battle. At the appointed time they fire missions to destroy the enemy and to provide illumination for friendly force operations. Of course artillery battalions and batteries also mass fire and fire blocking fires for motorized and tank subunits, and artillery fire is coordinated with that of these other elements.

Personnel in artillery subunits are taught how to operate on the basis of the overall plan at night during combined arms exercises. They must operate in close contact with motor riflemen and tankers and must maintain uninterrupted mutual contact with them during the course of battle. The training plan is very important and the deputy chief instructor for artillery must take a direct part in developing this plan. While issues covering artillery training may be covered in more or less general terms in the tactical training plan, they must be very detailed in the specific plan of the deputy chief instructor for artillery.

When subunits are preparing for a tactical exercise that has a live-fire stage, on the eve of the exercise they hold night tactical drills and integrated exercises and also training in firing and fire control.

When tactical conditions are being developed, everything is done so that the combat missions of getting oriented on the ground, reconnoitering the enemy, occupying firing positions, surveying and night moves are accomplished under difficult conditions.

The deputy chief instructor for artillery conducts the exercise with the force and safety umpires, consistently examines the planned course of the exercise and provides instructions on the basic problems of running combat operations in accordance with the concept of operations. A lot of attention is focused on setting up mutual support among the artillery subunits assigned for daylight support and the artillery, tank and motorized rifle subunits that are providing fire support at night.

During the exercise the deputy chief instructor for artillery must constantly know the situation, the status of artillery subunits and the missions that they are firing and he must also develop recommendations on their further use. During the entire exercise he and the umpires constantly watch that personnel observe safety precautions, especially during the live firing.

And now a few words about how one should evaluate the actions of artillery subunits during tactical exercises, especially while they are firing illumination missions. Analysis shows that one or several guns, as a rule from part of a battery, are used for this type of mission. Therefore their firing should be considered as the subunit firing an independent illumination mission during the exercise.

The following mission could be fired: illumination to support ATGM and direct fire weapons firing on enemy lines; defensive fires; fires on the objective of a combined arms attack; fires to support organic tank and motorized rifle subunit fire; orientational and directional illumination; illumination to blind enemy observation posts (electronic devices) and fire support assets; smoke screens on objectives (the creation of hot spots of fire).

A determination of the number of illumination rounds (mines) to be fired to accomplish the listed missions takes into account that a number of rounds must be used to adjust for direction, range and height of the burst and that high explosive-fragmentation rounds may be used in this verification. In addition, it is necessary to allocate an additional one round (mine) for each of the weapons (mortars) used to fire illumination rounds to monitor the firing results. Control is maintained by firing at the command of the chief instructor. The required results are determined by his personal observation and by information from the controller element.

Having one battery fire to illuminate terrain in order to reconnoiter the enemy and adjust high-explosive fragmentation rounds is considered firing a single mission to destroy a target.

A mission to illuminate, blind or screen a target is evaluated in accordance with the course for artillery training and consists of an evaluation of the commander's decisions, the method used to accomplish the mission and the time spent on the fire mission and whether the desired results were achieved (the target or object was illuminated, screened or blinded or a light reference or direction signal was set up at the assigned time and place).

The evaluation of the commander's decisions and the methods he used to accomplish the mission must also consider errors in determining the firing mission (illuminating one line when he was supposed to illuminate many, setting up continuous illumination instead of sporadic, or the other way around), errors in determining the number of guns needed to fire the mission, the expenditure of rounds (more than 20 percent over norm) and the sheaf width (25 meters and more).

The mission is not considered accomplished if the required results are not achieved, the illumination front is more than twice what it should be or the expenditure of rounds is more than twice what it should be. A mission that has been fired to blind the enemy is considered unsuccessful if the bursts are behind the objective to be blinded or the interval between bursts exceeds the established interval (50 meters and more).

The time for accomplishing an illumination, blinding and screening mission is defined in the Artillery Training Course by battery norms.

In conclusion, I would like to note that combined arms commanders must master the art of using artillery in combat and skillfully assigning missions to

batteries and artillery battalions when conducting night operations. And the artillery must focus more attention on setting up and maintaining constant mutual support with combined arms subunits.

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## GROUND FORCES

### ARTICLE DISCUSSES DEFENSE AGAINST LOW-ALTITUDE TARGETS

Moscow VOYENNY VESTNIK in Russian No 9, Sep 86 pp 65-67

[Article in "PVO Forces" section by Colonel G. Ivanitskiy, Belorussian Military District: "Low-Altitude Targets"]

[Text] At the present time the inventory of the probable enemy is gaining aerial attack assets that were developed on the basis of the latest scientific and technical achievements. They are equipped with fundamentally new control and guidance systems, as a rule fly at low altitudes, close to sonic speeds and have small effective echoing surfaces.

One can anticipate that during massive strikes the relative share of such small, fast assets will increase. All of this demands that when we look at the military training process for PVO units and subunits we take a new approach toward organizing exercises and their assorted training and drills and toward simulating an aerial enemy.

PVO forces in the Belorussian Military District, to include those units and subunits armed with air defense artillery (ZAK), are doing definite work in this area.

As is known, ZAK combat capabilities are determined by how timely reconnaissance assets are able to detect the aerial target, how much time it takes for the complex's elements to react and move to get ready to fire and whether the enemy is tracked and attacked. Therefore the way to increase firing effectiveness is through tapping those reserves which are inherent in the types of weapons being used, but that are not being exploited.

Experience teaches that low-altitude targets most often fly out of the hilly sections of the terrain, the heights along rivers, ravines, and depressions. And if they are not able to do this, they will fly the shortest route to the strike objective. Foreign experts feel that this reduces their vulnerability to PVO assets and also that radar sites will be able to detect such aerial attack assets at minimum ranges, which conforms, by the way, to the zone of intensive echo-signal reflection from terrain features.

At the same time, by knowing the operating methods of low-altitude assets and the terrain, it is possible to determine strike objectives and direction of

flight with good accuracy. This means that it is possible to select positions for reconnaissance assets efficiently and to distribute angular zones of responsibility within the planned sectors for each of them. For example, it is advisable to use SRTs's [reconnaissance and target designation stations] to detect targets above 200 meters. Below that altitude it is advisable to use RPK's [automatic direction finders] and TZK's [commander's zenith scopes] while using radar in the SDTs [moving target selector] mode as much as possible.

When setting up radar sites to search for these types of aerial attack assets, it is of critical importance how fast and accurately their commanders are able to determine the zone of coverage at low altitudes and then operate in accordance with the results that they obtain. It is preferable that this be done using the indirect method, without sending high energy emissions into the atmosphere, so as not to expose positions prematurely.

Units are using templates to do this. These templates are able to determine the detection range for angles of obstruction and a given target flight altitude. The totality of these ranges are drawn on a map and this becomes the RLS [radar] zone of coverage for a given altitude. After evaluating this information, the commander makes his decisions as to whether to move to a new position or remain at the old one.

A paired TZK-RPK system works well in watching for low-altitude targets. The assets that make up this system are linked with synchronous communications which forces the RPK antenna to be aimed at a target that an observer has previously detected. It is important to train the two links of the system to work in harmony and to reach the point where the crew of the automatic direction finder quickly transitions from "central optical control" to automatic target tracking.

Experience shows that when carrying out these recommendations, radar assets in air defense artillery subunits armed with ZAK are able to detect low-altitude targets at ranges that guarantee enough time to take them under fire.

The effectiveness of combating low-altitude targets is directly dependent on the survivability of PVO forces and assets. To reduce the probability of their being destroyed with very accurate weapons and to keep from exposing the subunit's combat deployment prematurely, before the attack begins commanders try to reduce the amount of electronic gear that is simultaneously operating. If possible, equipment should be strictly regulated into operating and non-operating. During the non-operational period, optical reconnaissance equipment is used as much as possible. Information coming in from adjacent radar sites or the higher commander's radar is also used.

When the enemy air attack begins RPK searches its sectors of responsibility, changing its position immediately after it has finished. This forces the commanders to plan positions beforehand, evaluate them and equip them where possible.

Other methods for increasing the effectiveness of ZAK employment in battle include improving the firing crews' methods for combat operations. And this

leads to reducing the time for preparing subunits for firing, increases their reliability in detecting and tracking low-flying targets and means that it is possible to fire on them in a timely manner.

From the moment it receives a target designation (a mission to fire at a target), an air defense battery works very intensely. During the firing cycle, which literally spans several dozen seconds, the battery must pick up the target, identify it, set up automatic tracking, perform a number of operations, give out almost ten commands and get reports on them, evaluate the firing results and then return the complex to the travel position. Therefore a lot of attention is focused on training for battery coordination and for firing itself. It is important to have duties efficiently distributed among crew members and if necessary, to develop abbreviated (but without losing any information) and understandable commands which are transmitted by voice or pennant. It is also important to reach the point where personnel carry out their duties automatically.

It is possible to develop successfully very intense and useful fire missions against low-altitude targets at air defense artillery ranges. The conditions that are created there allow subunits to make a move, learn to select positions with small obstruction angles and assign sectors of responsibility, fire missions in the SDTs mode and apply various methods for detecting aerial enemy targets and sending out notifications about them.

Firing is periodically conducted against simulated aerial targets at the ranges to improve combat operating methods further. Batteries first fire on descending flight trajectories and then on ascending trajectories. This shows that units that have trained can manage this type mission in less time than a low-altitude target would be in the ZAK firing zone.

I should note that a number of measures that personnel complete beforehand promote success in accomplishing such firing. First, the duel TZK-RPK detection system is created and the accuracy of target designation depends on the correctness and accuracy in coordinating these elements. Second, weapons are loaded beforehand (all safety measures are observed) or rounds are positioned in the ammunition feeder and the loader is positioned so that it will send the first round into the extractor. Third, the weapons' belts are attached to the PAN [automatic loader] and the loader watches on the null-indicator to insure that the mismatch between the weapons and PAN is minimal. Fourth, scouts and RPK simultaneously conduct IVTs [information and computer center] reconnaissance. If the automatic direction finder complex does not go into automatic tracking after it is forced to swing to the target, firing is conducted using TZK data.

In my opinion the experience that we have accumulated in firing at helicopter targets is worth some attention. Under real conditions, a helicopter may also be considered a low-altitude aerial target. The difficulty in combating them is that they are within the air defense asset's field of vision for a very limited time (30-50 seconds). And also the firing range for the ATGM that helicopters employ is constantly increasing. These are the reasons for the urgency in improving the methods and means for firing on this type of target.

The firing that some battery commanders who have replaced the existing weapons' collimators with PNV 10PV sights have done is of interest because of this problem. The replacement allows them to fire at helicopter targets with better than usual results.

Two versions of target mounts have been tested. One is on the position vacated by the collimator that was removed and the other is next to that position. In the latter case they are fastened for only one loader or for both at the same time. The latter method is the better.

These are preliminary recommendations. They should be improved as we accumulate experience in using ZAK's against low-altitude targets. To do this, air defense artillery subunits must continue to conduct training fire at district training centers and must also continue to train in firing against low-altitude targets using radar sites. It is apparent that it will be worth expanding the use of TZK to carry out missions on any aerial target.

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## GROUND FORCES

### ARMING AND PROTECTING THE SOLDIER OF THE FUTURE

Moscow VOYENNY VESTNIK in Russian No 9, Sep 86 pp 89-90

[Article in the "In Foreign Armies" section by I. Kiychenko, taken from materials in foreign press: "Arming and Protecting the Soldier of the Future"]

[Text] In 1984 the SEICON Company demonstrated a model of the equipment for the soldier of the future, conventionally called the "Soldier of the 21st Century," at the annual Weapons and Equipment Show (BAEE [not further expanded] 84) that is traditionally held in Aldershot (Great Britain). Here we found an echo of the results of research associated with the use of scientific and technical achievements, especially in the area of computers, in individual military equipment.

The weapons of the Soldier of the 21st Century were of special interest. The individual weapons system includes a combination rifle-grenade launcher that has two barrels. One can fire armor-defeating, high explosive-fragmentation, smoke, incendiary and illumination rounds out of the upper (larger caliber) barrel. The lower barrel is standard rifle caliber and is designed to fire rounds without cartridges. The proposed effective firing range of this weapon is 400 meters. It is aimed at the target using a special electronic system mounted on the soldier's helmet. In the event it fails to operate, the weapon may be aimed in the usual manner.

In addition, the soldier will be equipped with two launchers with "ground-to-air" rockets to combat enemy aviation. The soldier will carry these rockets on his back. The rounds will be launched from the ground using an automated aiming system.

A much more technically complicated and interesting element of future equipment is a helmet which represents a multi-functional system. The helmet is hermetically sealed and provides protection both against bullets and fragments from rounds and mines, and also against toxic and radioactive elements and biological aerosols when operating in a contaminated atmosphere. The helmet has a filtering and absorbing device mounted in it. The filtered air is fed to the soldier's face by a fan.

The helmet is equipped with a microphone for sending voice commands, a gyro-stabilized laser target indicator, a thermal camera and a noise-sensitive

sensor that provides an acoustical indication in a circular zone. The sensor has an analyzer to investigate signals that it has picked up and is able to determine a target by checking for their acoustical indicators in the terrain. The front part of the helmet has a periscoped display screen which is the display for a miniature computer that is mounted on the backpack. The screen reflects a variety of information that the soldier must have during the course of a battle. In particular, the screen indicates aiming points for the weapon and target indicator, the thermal camera's field of vision, maps, plans and a depiction of the terrain.

The small-size computer has a large amount of memory and is able to quickly analyze data that it has gathered. It has a symbolic information processing system and can conduct a number of operations automatically, to include displaying sketches, grid coordinates and other graphical and numerical data along with the terrain that is being observed. The display can also mark targets that are invisible in the dark or that are masked, but that are giving off thermal radiation that is detected by the thermal camera. This includes targets such as personnel, weapons and equipment.

The soldier of the future controls all of these automated weapons and equipment systems through a computer using vocal commands. The computer picks up the commands through a throat microphone and these commands are a special code. The weapon is loaded with one type of ammunition or another, rockets are launched and so forth through the use of the computer. The computer also provides a quick means for transmitting coded and time-compressed information, rapidly reorients the radio transmitter and also compensates for errors that have entered the communications channels.

Thus the miniature computer provides a communications link between the soldier and the command, control and communications center. In other words it is essentially the lowest level of the military automated control system. The system that has been developed on this foundation allows every soldier to get quickly oriented on the ground, determine targets and fire on them, regulate the air temperature in his under-uniform, maintain constant communications with his commander and so forth.

The future soldier's uniform that was displayed at the show consists of multi-layered clothing which also serves as a means for individual skin protection. The first layer of underclothing has an electrical heating system and consists of pants, a shirt and gloves. The energy source and heating system regulator are mounted on the soldier's backpack. The outer clothing consists of overalls and a jacket combined with gloves and is designed to protect against weather and destructive elements from contemporary weapons, to include toxic, radioactive and biological substances. The material used in them is light, very air permeable, able to absorb infra-red rays and comes in one standard color. To camouflage the soldier on the battlefield the uniform (as all other elements of the soldier's equipment) can be colored with a special dye from aerosol cans that give one camouflaging tint or another depending on the specific terrain. This coloration is difficult to detect under visual observation, to include through the use of instruments.

The means for individual armor protection have been included. This is primarily in the form of so-called "tactical body armor" which protects a man's body against fragmentation and bullets flying at average speeds and his vital organs from high speed destructive elements (a bullet or fragments from a bomb, mine or round). The body armor which has straps with special buckles and fasteners allows the soldier to carry comfortably and move with a backpack, ammunition and other elements of equipment. The soldier should wear boots with hard "armored" soles and elastic "armored" tops that will protect the legs from anti-personnel mine explosions.

It is important to stress that new construction materials were used in this equipment. These significantly lighten the weapons and equipment and simplify their manufacture. Some of these materials are already being used in the military. According to experts from the company, they will go into serial production in the future and will become everyday products.

There is no doubt that the show was primarily designed for advertising and expresses the desire of the companies that are manufacturing military products to attract more customers. But at the same time the items that were shown specifically allow one to get a better understanding of the views of foreign experts in further improving the soldier's individual weapons and equipment. These improvements are being aimed primarily at significantly improving the individual soldier's combat capabilities and are designed to provide a high level of protection against the various destructive factors of contemporary weapons and also against unfavorable weather conditions. In essence, this model testifies as to the attempts to make an animated robot for military purposes.

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## AIR/AIR DEFENSE FORCES

### DISCUSSION OF U.S. DEVELOPMENT OF COMBAT, STEALTH AIRCRAFT

Moscow TEKHNKA I VOORUZHENIYE in Russian No 12, Dec 86 (signed to press 18 Nov 86) pp 8-9

[Article by Maj Gen Avn (Res) I. Lebedev: "The Development of Combat Airplanes"; from materials in the foreign press]

[Text] Many materials on ways for the development of military aviation have appeared recently in the foreign press. Versions of various airframe designs, aerodynamic questions, problems of the airplanes' power supply, and possibilities for the employment of new structural materials are discussed. On the basis of results of advanced investigations and studies which are obtained in laboratories and design offices, the forecasting of promising aircraft of the next two decades is being attempted. Specialists, in particular, have come to the conclusion that during this period the development of aviation will proceed along the following basic directions.

Manned and unmanned hypersonic airplanes intended for use as interceptors in the air defense [AD] system as well as supersonic and subsonic airplanes--so-called Stealth aircraft which, it is assumed, will be extremely difficult for electronic means to detect--will be developed. As regards the field of engine construction, here the appearance of new engines is expected, in particular with ceramic elements which permit increasing thrust and reducing substantially fuel consumption, as well as basic improvements (first of all, to increase economy) in existing engines, in particular, turbofan engines.

It is planned to introduce into construction type alloys and composite materials so as to reduce the weight and increase the strength of airframe elements. Studies are continuing in the field of control of a laminar layer. It is asserted that with the same energy expenditures this will permit increasing lift and, consequently, increasing significantly flight range and duration.

Work will be continued on the so-called integration of onboard systems as well as on finding new methods which permit increasing the maneuverability of combat aircraft--through a reduction in static stability and the introduction of its automatic control, the use of engine thrust for the direct control of lift and lateral forces, and so forth. To realize the measures which have been listed, consideration is being given to the possibility of using design schemes of the "canard" and "tailless" types and an aircraft with an asymmetrical wing or a forward-swept wing. It is expected that the "canard"-type scheme will permit

increasing maneuverability and providing the aircraft with two additional degrees of freedom. Recently, the possibility of the direct use of the thrust of jet engines in the process of aircraft control has been studied abroad. In the opinion of some specialists, the employment of a propulsive jet nozzle with variable geometry will permit increasing the overall lift at takeoff or in horizontal flight at great speeds and will provide reverse thrust during landing as well as the optimum engine operating mode during supersonic flight.

They are seeking design solutions which further the more efficient use of special zones of the air flow to suck in the laminar (boundary) layer and direct it to the streamlined surfaces.

As is known, with a laminar flow around aerodynamic surfaces the effect of a reduction of drag is created, which is equivalent to a reduction in fuel consumption. One of the possible methods for the formation of a laminar flow-around is believed to be the creation, on the streamlined surface, of special zones for sucking in the boundary layer (slots, pores). Other specialists suppose that the optimum shape of the wing or active control of the air flow prove to be more acceptable to ensure the laminarity of the boundary layer. For a reduction of the drag and a further improvement in the aerodynamics of the aircraft, which is necessary to increase its maneuverability during supersonic flight in the future, they are counting on completely abandoning the external suspensions of armament.

It is expected that by the end of this century information processing systems will be widely employed for flight control and fire control as will systems for the detection of airplanes which are flying at low altitudes. By means of the integration of basic onboard systems it is planned to introduce into the piloting of aircraft the principle of control by voice.

To reduce the probability of aircraft detection by electronic means, it is considered expedient to use special coatings with low reflectivity and designs of special shapes. It is hoped that the capability of detecting airplanes with infrared equipment will be reduced by employing special orientation of the rotating nozzles of the jet engines.

Important research work is being conducted on the discovery of more power-intensive fuels than kerosene. In particular, the question of the use of liquid hydrogen--the efficiency of which is three times greater than that of hydrocarbon fuels--is being examined. However, the density of liquid hydrogen is less than that of kerosene; therefore, it is necessary to increase the volume of the fuel tanks. In addition, effective thermal insulation will be required since liquid hydrogen should be stored at a temperature no higher than  $-253^{\circ}\text{C}$ . Another obstacle to the introduction of hydrogen fuel is considered to be its high cost (now it is obtained basically by the chemical processing of hydrocarbon compounds). In this connection, as was reported in the foreign press, plans are being developed for mastering the commercial production of hydrogen by the electrolysis of sea water.

In the opinion of foreign military specialists the advanced strategic bomber externally most likely will be a "flying wing" with the uniform distribution of weight. In this case, the fuselage of the aircraft will possess lift. Also

being examined are schemes with wing panels which are retracted into the fuselage. The engines of such an aircraft will be located in the central part of the fuselage (it is planned to install turbofan engines for flights at low speeds and ramjet engines for flights at supersonic speeds). Here, static stability will be substantially less which, as is expected, will provide the capability to control the aircraft for yaw angle using flaps mounted on the trailing edge of the wing, and for pitch angle--using small vertical control surfaces. It is proposed that an active control system be employed with automata for stability and damping to prevent the appearance of flutter in a certain range of speeds. The basis of such a system should be an analog computer. Instructions issued by the control stick and sensor signals are converted to electrical signals which control the main drives of the control surfaces. It is intended to integrate such a system with a remote drive control system in which there will be no mechanical connections between the control stick and the control drives.

It is believed that new composite materials which contain carbon, boron, beryllium, and fiber glass will find wide employment on the strategic bomber. The physical and mechanical properties of these materials are determined basically by the characteristics of the strengthening fibers.

In the opinion of specialists, the most probable fuel for the bomber will be liquid hydrogen whose weight will comprise 30-50 percent of the aircraft's take-off weight. It is intended to use the onboard system intended for the storage of the liquid hydrogen also for cooling the aerodynamic surfaces which heat up during supersonic flight.

Foreign designers of strategic bombers are striving to reduce to the minimum their give-away signs and thereby increase the survivability of the airplanes when overcoming the zones of action of air defense weapons. In order to reduce the number of radio contrast places on the aircraft surfaces, it is planned to cover its skin with such radio ablation materials as polytetrafluoroethylene, epoxy resins, and special paints which absorb or attenuate the radio signal which has arrived (a significant portion of the energy of this signal is transformed into thermal energy).

According to the calculations of specialists, the nozzles of the engines of special configuration and new insulation materials will provide the capability to reduce the heat radiation of the engines and thereby complicate the detection of the aircraft by IR [infrared] means. In addition, it is intended to equip the airplane with more effective ECM [electronic countermeasures] and equipment which permits executing a maneuver to bypass ground radars and with special equipment which warns the crew of the aircraft's irradiation from the direction of the rear hemisphere.

Along with the creation of new aircraft, the existing fleet of strategic bombers is being modernized. Designers are working on an increase in the power of the power plants and reinforcing the structural elements of the fuselage and wings. The aircraft are being equipped with additional onboard equipment. One of the modernization tasks is the creation of airplanes which are capable of carrying cruise missiles on board.

Foreign military specialists believe that it is virtually an unrealistic matter to create a multipurpose fighter of the year 2000 model which could combat the



aerial enemy at various radii of action and also accomplish reconnaissance missions. Therefore, they consider it expedient to have three types of combat aircraft: a heavy air-superiority fighter, a long-range intercept fighter and an aerial combat fighter.

The heavy fighter should have high maneuverability at speeds of Mach 0.6-1.2 and develop a maximum speed on the order of Mach 2.2-2.5, a ceiling of 18 kilometers, and a radius of action of up to 1200 kilometers. It is thought that the airplane will be equipped with an onboard increased-range radar. The design weight of such an aircraft is 19-26 tons.

It is planned to create a long-range intercept fighter on the basis of the heavy fighter. By suspending additional fuel tanks, it is planned to increase its radius of action to 1500-2000 kilometers.

According to the estimates of foreign specialists, the aerial combat fighter will be an aircraft weighing 10-15 tons. Its maximum speed will be Mach 1.8-2, radius of action 900 kilometers, and service ceiling--15 kilometers.

It is planned to increase the duration and range of flight of prospective fighters at supersonic speeds up to 60-80 percent of the total time of flight (on contemporary foreign fighters this indicator equals 20 percent). It is intended to realize such parameters through the development of new TRDD's [turbo-jet bypass engine/double shaft turbojet engine] which would permit accomplishing supersonic flight in the nonafterburner mode and would have a specific fuel consumption which is 25 percent less in comparison with contemporary engines.

It is intended to attain great flight speeds in combination with the necessary maneuverability of the fighters by employing the "canard" and "tailless" aerodynamic schemes. The design should have a thin triangular wing with small elongation and high sweep and a spindle-shaped lifting fuselage with a pointed nose section. It is hoped that high maneuverability will be attained, in particular, thanks to the employment of a system of direct and, possibly, automated control of the lift and lateral forces and the engine's thrust vectors. It is planned to bring the lift-to-drag ratio of such aircraft to 6-8 (it is now about 4). The g-loads in flight will be increased to 9 (6.7-7.3 on contemporary fighters). The introduction of such systems, as foreign specialists believe, will lead to the appearance of new procedures, methods, and tactics of aerial combat.

In order to obtain high speeds and simultaneously ensure the required maneuverability in subsonic flight and acceptable takeoff and landing characteristics of the airplane, along with the introduction of a system to control lift and lateral forces it is planned to use a wing with in-flight variable camber and jet flaps installed on it.

The attack aircraft which are now in the inventory of the armies of capitalist countries are intended for the close support of troops on the battlefield. According to statements in the foreign press, beginning with the 1990's they will be replaced by a new generation of aircraft. The appearance of heavy attack aircraft with a weight of 19-22 tons and of light aircraft with a weight of 6-8 tons with a crew, as a rule, of two men placed in tandem is expected.



Plans for prospective attack aircraft envision the use of a regular aerodynamic scheme with a straight or swept wing which has developed mechanization (slats, flaps, air brakes). In their development, they are striving to ensure the optimum relationship of the main characteristics of the aircraft: speed, flight duration, maneuverability, possibility for operation from unprepared runways, bomb weight, missile weight, and other armament.

Foreign specialists believe that for the next generation of attack aircraft to possess the required maneuverability at high speed they should be equipped with a system for direct control of the lift and lateral forces and should have a small static margin. The capability to control the thrust vector, according to the estimates of specialists, will provide the aircraft with shortened takeoff and landing. It is expected that the system for control of the attack airplane will be automated and electroremote with repeated redundancy of the main systems and a considerable separation of channels to ensure the survivability of the airplane. It is expected that the accuracy of conduct of fire in all flight modes will increase with the introduction of automated systems, which will permit changing the tactics for the combat employment of the next generation of attack aircraft.

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## AIR/AIR DEFENSE FORCES

### CHESNOKOV ON AIR DEFENSE COMBAT TRAINING

Moscow VOYENNIY VESTNIK in Russian No 11, Nov 86 (signed to press 9 Oct 86) pp 66-70

[Interview with Colonel General Yu. T. Chesnokov, commander of air defense troops of the Ground Forces: "Reserves for Increasing Combat Readiness"; first two paragraphs are source introduction]

[Text] The latest training year has ended. The results of the combat and political training are being summed up in the units and subdivisions. The districts and the groups of forces are sending in reports that many military collectives have fulfilled the socialist pledges that they took and have achieved good and outstanding indicators in military labor and in the reinforcement of military discipline.

New exercises, classes, and drills lie ahead. Also lying ahead are the struggle for the further implementation of the decisions of the 27th CPSU Congress, and the raising of the level of the combat readiness among the troops. Answers to questions asked by this magazine's editorial office, which are linked with the combat training of antiaircraft units and subdivisions and with the tasks that they will have to resolve are provided by Colonel General Yu. T. Chesnokov, commander of air defense troops of the Ground Forces.

[Question] Was the training year that has just ended unusual in any way? What are its preliminary results?

[Answer] Probably never before has the new nature of the tasks confronting the Soviet nation been sensed as clearly as it has during our time, which is characterized by major shifts in the sociopolitical and scientific-technical spheres. Under these conditions it is necessary to plan the key areas in our work, which make it possible within the shortest periods of time to obtain the greatest return, and then to concentrate all our attention in those areas.

The international situation has become greatly complicated and there has been an intensification in the aggressive nature of imperialism. Fulfilling their constitutional duty of defending the socialist Homeland, the troop personnel have been working persistently and purposefully to increase their combat readiness and to maintain it at the level of the constantly growing requirements. Today our work is built on the basis of the complete

intensification of combat training. Briefly stated, the essence of that work can be formulated in this manner: we must work more quickly, more efficiently.

Without being concerned about more rapidly putting young specialists into formation and assimilating the newest models of technology and armament, it is simply impossible to resolve the combat-training tasks successfully, and, if need arises, to provide reliable cover for the troops in various types of combat actions.

It would be incorrect to feel that this approach to questions of instruction is fundamentally new to us. In the advanced military collectives there has been a constant (and successful) search for the most promising, the most efficient ways to fulfill the combat-training program. That has made it possible to save time, to increase the effectiveness of every exercise, class, and drill, to improve the methodological skills of the officers and noncommissioned officers, and thus to achieve a sharp improvement in the tactical and special training of the units and subdivisions.

This work was especially extensive and fruitful during the past training year. As a result the training process became more dynamic and there was an increase in the return on every training measure. We are currently summing up the final results. We proved to be successful in some regards, but unsuccessful in others. A thorough critique lies ahead. But I would like to dwell on the shortcomings that were revealed.

First. When taking steps to restructure the instructional process, individual commanders did not carry out well thought-out or painstaking preparatory work, and they failed to remove the barriers that had previously been artificially created and that were inhibiting the implementation of the restructuring. But miracles do not happen. You cannot change from being among the laggards to being among the advanced troops simply by waving a magic wand. For example, an obsolete instructional material-technical base, or even a modern one that is inoperative, or poor executive discipline, make it impossible to achieve that change.

Second. People everywhere did not take a comprehensive approach to the process of restructuring the training. And yet much has already been said and written to the effect that, by taking into consideration all the factors that improve the effectiveness and quality of the fulfillment of the combat and political training program as a whole, and by putting into action all kinds of levers for exerting an effect upon them, it is possible to count on success. One should not, for example, concentrate one's attention only on the instruction of the personnel, while forgetting indoctrinational work.

Or something else. During recent years people among the troops have devoted serious attention to the practical directedness of any training measure, whether it be a field exercise, a drill on the instructional equipment, or a class in technical training at the motor pool or in a classroom. That is correct. The level of practical instruction achieved by the officer, noncommissioned officer, or enlisted man has always been the chief criterion of his ability to fulfill tasks on the field of combat. But the officer candidates, the future officers who will be in charge of the training process,

are not yet been trained for this within the school walls. Hence the unproductive expenditures of time during the period of their probationary assignment among the troops.

And, finally, the third major shortcoming that prevents us from carrying out a cardinal restructuring of the instructional process and making a sharp qualitative leap forward lies, in my opinion, in the fact that the ideas of acceleration, of improving the effectiveness and quality of labor, have not yet imbued absolutely all the officers, at all levels. The restructuring is proceeding in a more difficult, slower manner than one would desire in the platoon-battery-battalion link. Although, to a certain degree, it had been possible to foresee this situation. The officers of specifically those subdivisions are the immediate organizers and leaders of the exercises, and stand closer than anyone else to those who must chiefly be taught and educated. But they serve for a relatively short period of time and, consequently, the pedagogical experience that they have is insignificant. Frequently their omissions are explained simply: the young officers have not been sufficiently trained.

Moreover, the situation is not entirely favorable in our links of ours. It will still be necessary to fight against those who, in words, are in favor of restructuring the work, but who actually, hiding under high-sounding phrases, continue to operate, as the expression goes, in a so-so manner, who have been sitting too long, to use the figurative expression of the General Secretary of the CPSU Central Committee, "in the foxhole of old ideas."

The reasons for these errors, as well as a number of others, are being analyzed by us, and we are taking steps to eliminate them and make sure that they are not repeated in the future. It is felt that this will promote a situation in which, on the basis of the further intensification of combat training, and the improvement of its effectiveness and quality, the personnel in the air defense troops of the Ground Forces will successfully fulfill the tasks assigned by the USSR Minister of Defense for the new training year.

[Question] In what basic areas will this work be done? To what questions is it planned to devote special attention?

[Answer] We plan to operate, as we have in the past, in two main areas. First: to improve the traditional, time-tested forms and methods of instruction. And second: to search for everything that is new and progressive and to introduce it into the training process.

The second path is all the more important in that the independence and initiative of the persons executing the tasks have become a vitally important requirement of today. At the present time we need, more than we have ever needed before, people with a spark of innovation, people with a self-interest, people who know how to fulfill their duties creatively with a high degree of professionalism. That is why the commanders and political workers are simply required to act promptly in recognizing, seizing upon, and disseminating the kernels of advanced experience and in making them the property of the entire collective.

This work lies not only in telling others about everything that is best and that actually deserves attention, but chiefly in introducing those innovations in one's own outfit, in generalizing that experience and developing it farther. I would especially like to mention the importance of propagandizing and disseminating advanced experience.

First, it must be demonstrated thoroughly, in the smallest details, which most frequently constitute the crux of the matter. Secondly, this must be done in a clear, convincing, and, I might say, attractive manner. It must be done in such a way that others will want to adopt the innovation and introduce it as quickly as possible. In this regard the military periodical press can give us a lot of assistance.

And people who show initiative, people who are creative, deserve commendations for their actions, and this always has a favorable effect upon their further attitude toward the job at hand and encourages their labor.

But it is simply inadmissible to allow the fulfillment of the combat training program to drift along under its own momentum, simply relying upon the conscientiousness of the exercise leaders. Therefore, while taking all steps to develop and encourage initiative, we planned a series of questions, the resolution of which will require more work.

We are already conducting a search for ways that will enable the commanders, political workers, and staff officers to rethink more rapidly their attitude toward the organization of the training process. Thus, it will be necessary (and as rapidly as possible) to eradicate completely a formal attitude when developing and implementing any plans. It is important to make those plans viable and realistic. It is necessary in a creative way, with a consideration of the tasks to be resolved during the training year, to employ various forms and methods of instruction. It is necessary not to disturb the methodological sequence when conducting the basic measures in combat training: the smooth coordination of the subdivisions and units, the organizing of exercises dealing with air defense and fire control, and on trips to training centers and firing ranges.

It will be necessary to effect a fundamental change in the attitude toward the planning of the joint training of antiaircraft units and subdivisions and aviation, and also that with motorized infantrymen and tankmen.

Experience shows us that, when executing coordinated actions with aviation, complications sometimes arise in coordinating the plans for the simultaneous practicing of the combat-training tasks during the period of instruction and in the long view for the training year. The responsibility here lies primarily on the air-defense leadership complement.

Wherever this question is neglected, one cannot expect any good results. Only drills directed at real targets that overcome the air-defense system at low altitudes and high speeds and that employ maneuvers under the cover of interference to avoid antiaircraft fire, drills that are supplemented by work on trainers, guarantee good training of the personnel.

Separate instruction with the motorized-infantry and tank units and subdivisions can lead to a situation in which not all the antiaircraft officers will know how to work effectively on the terrain, or how to organize coordinated actions with the troops being covered. But the combined-arms commanders will not acquire solid practical skills in controlling the air-defense forces and means in modern combat. Both situations will have a detrimental effect upon its results.

Problems of organizing joint exercises for antiaircraft artillery and missile subdivisions that are part of motorized-infantry and tank regiments have been resolved, and are still being resolved, basically correctly. Unfortunately, with the antiaircraft units the situation is not always like this. In the new training year it is necessary to preclude completely any instances when, having been sent out onto the field in accordance with a single plan with the troops to be covered, they subsequently work out their questions, factually speaking, independently. In this kind of situation the combined-arms directedness of the exercises for the officer complement of these units is reduced only to the prompt plotting on the maps of the changes in the tactical situation.

It will be necessary on a broader and more aggressive scale to plan and conduct joint exercises with subdivisions of engineer, chemical, and other special troops. It is necessary, in the course of these exercises, for the antiaircraft men to receive practical instruction in crossing water obstacles, in setting up and camouflaging positions, and carrying out the special processing of the personnel and equipment.

Nevertheless, it is not always possible to implement completely even the most perfect plans that were developed on the eve of the training year. Life makes its changes. And it is necessary for the commanders to be especially attentive when preparing the calendrical plans for the month, and to think things out thoroughly when planning the training measures for the week, indicating their specific details and reflecting them in the exercise schedules for the batteries (companies).

Only then will the strenuous but realistic plans actually become the basis for the subsequent work, and help in a purposeful way to execute the measures that have been planned. This will provide the opportunity also to carry out concrete control of the combat training.

But achieving a situation in which the various changes in the plans are made as rarely as possible (and in no instances for purposes of simplifying them) is within our capabilities.

A very important question is the improvement of the training for the officers who are the organizers of the training process. The problems that move into the foreground here are those that are linked with the acceleration of the growth of those officers in their new assignments. This pertains chiefly to the graduates of the military schools. And this is completely explainable. It is precisely during the first years of service that the foundation of their methodological knowledge and practical skills is laid, and their views concerning service are formed.



The fact that the recent graduates at first are incapable of conducting a particular exercise in a methodologically efficient manner is, to a certain degree, understandable. Nevertheless, it is inadmissible to prolong the period of their development as organizers of combat training in the subdivisions.

In my opinion, the commanders who act correctly are the ones who not only make complete use of the traditional and time-tested practical forms of officer training (instructor-methodology and demonstration classes, unannounced quizzes, etc.), but also devote sufficient attention to the independent work of their subordinates, who created the conditions for having that work conducted efficiently, and who monitor it. Good results are provided by individual assignments that have a practical directedness. These can be plans for the conducting of various classes and exercises with the subdivisions, unannounced quizzes or group exercises with the officer complement to deal with the most complicated topics, etc.

The resolution of certain questions, primarily those linked with the fastest growth of the young officers, as I have already noted, must be assumed by the military schools.

In a number of units, the people have undeservedly forgotten such a rather effective method as teaching the officers how to execute the duties at a level higher than the one to which they are assigned. Thanks to this method, first of all, the subsequent advancement to the new assignment is carried out painlessly and more rapidly. Secondly, by acting for the chief, the officer expands his horizon and begin to rethink his direct functional duties. He has a more thorough understanding of them and, consequently, executes them more creatively.

And, finally, thirdly, it is possible to resolve questions of interchangeability, especially among officials at the headquarter elements. And that has a direct influence upon the viability and rapidity of restoring the combat capability of the antiaircraft units and subdivisions.

Thus, in the search for a way out of the emergency situation that has been created by the leader at an exercise (for example, the loss of some of the personnel and equipment after an enemy strike), the commander learns how to resolve various tasks as a complete entity. How are the wounded to be evacuated and on what equipment, how are the equipment and missiles to be restored and redistributed, how is control to be organized, what measures of defense and camouflage should be carried out, etc.? It is necessary for him to know a lot in order to cope correctly and promptly with these and other problems.

It is certainly difficult here to delimit, or to separate sharply one from the other, the functions of the officer as commander and the officer as engineer. But is it necessary to do this? Especially since, in everyday service, those boundaries in our combat arm are gradually being wiped away. It is possible that we can reject this kind of division, which has already become almost arbitrary?



In order to improve the quality of combat training, it is extremely important to use intensively and efficiently at exercises the field training-materials base and training equipment (UTS). In the new training year we plan to develop more broadly and to use with a greater return these facilities that are situated on military posts or close to them. In addition, we plan to preclude completely those instances when trainers, simulators, and other training equipment among the troops stand idle or are used inefficiently, as occurred in a number of places in the past training year.

[Question] Recently entire trainer systems have appeared among the air-defense troops, which make it possible to conduct exercises dealing with combat work and fire control with subdivisions and even units. What are the prospects for using them?

[Answer] I am convinced that the future belongs to these comprehensive trainer systems. Among the air-defense troops in the Ground Forces, the work of creating them has already been in progress for a number of years. Collectives of inventors and efficiency-improvement experts in many units in all the districts and groups of forces have been taking active part in that work. Good results have been achieved among the air-defense troops in Belorussian and Leningrad military districts, and at a number of centrally subordinate institutions of higher learning and units. This is also attested to by the results of the competition that has been conducted and the exhibitions of achievements of efficiency-improvement experts and inventors.

Trainers, simulators, and combat technology that have been coordinated with one another and that are linked to one another make it possible simultaneously to train the combat crews at the command points of antiaircraft units, the air-defense control points of motorized-infantry (tank) units and large formations, and the commander points of subdivisions and fire units in the single air and interference situation.

Also, in the course of "combat" it is easily to monitor objectively the actions of the persons being trained, and it is possible to carry out combat work both at real and simulated targets. In the latter instance, if necessary, the air situation of any complexity is repeated.

The specialists in the Belorussian and Carpathian military districts have gone even farther. On the tactical-fire trainer complexes that have been created there, the antiaircraft artillery subdivisions were given the opportunity to execute training fire missions from [nakladnyye stvoly] to practice the time-performance norms for tactical, reconnaissance, and engineer preparation, protection against mass-destruction weapons, etc.

At the present time the projects that have been called upon to be the best ones are being introduced into the troop training process, and many have formed the basis of the training complexes being developed by industry. Some of them have already undergone troop tests, have got positive ratings, and will be taken on as standard equipment in the near future.

[Question] In certain motorized-infantry and tank units of the Ground Forces, experiments are being conducted in using new methods to instruct the personnel. Is similar work being done in the troops that are subordinate to you?

[Answer] In a number of our training units, classes have been carried out for a rather long time on the basis of methodologies that were developed on the basis of the theory of the gradual formation of mental actions and concepts with the use of training charts (UTK). The advanced, most experienced officers are employing them successfully and have been achieving considerable results when instructing officer candidates.

We are taking part in the development of a system for teaching mechanic-drivers without the use of lectures, which system is being tested in training units of the Ground Forces.

Mimic panels have been created for practically every type of RLS [radar station] or launch unit. By using them, the personnel independently learn how to turn the apparatus on and off, and how to carry out its functional monitoring and technical maintenance. There has been a considerable simplification and speeding up of the repair of electrical-engineering and radar devices on the basis of test-path circuits that have been developed in the units.

Wide use is also made of classes in programmed instruction for various combat-training subjects.

For many years we have made it a practice to use the instruction method linked with taking the subdivisions and even the units into areas of intensive flights by Air Force aircraft. This enables them to practice more efficiently the tasks of joint training. The method has demonstrated its value and, starting with the new training year, will be included in the combat-training curricula in the units and subdivisions.

In recent years certain time-performance norms in tactical and fire training have been changed downward, and the conditions for executing them have been made more complicated. Firing courses have been made more similar to actual conditions of modern combat, and methodologies that make it possible to execute tactical and fire missions in the course of exercises with live firing have been developed and are being persistently introduced into the practice of troop instruction.

In conclusion I would like to emphasize once again that, at the present-day stage, the areas that have become the chief ones in the further improvement of the combat training of the troops are the intensification of the instruction process itself, and the improvement of the effectiveness and quality of practicing the combat-training tasks. But any intentions, even the best ones, will remain only intentions until every enlisted man, noncommissioned officer,

warrant officer, and officer is imbued with the awareness that it is necessary to achieve the highest possible goals in the mastery of their military specialty. And what opens up here is a broad field of activity for the command element and the engineer-technical and party-political complement of the air-defense units and subdivisions of the Ground Forces.

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## AIR/AIR DEFENSE FORCES

### OPTIMIZING COMMAND DECISIONS IN USE OF ELECTRONIC EQUIPMENT

Moscow KRSNAYA ZVEZDA in Russian 12 Dec 86 p 2

[Article by Col D. Dmitrishin, senior combat training officer for the Surface-to-Air Missile Troops of the Air Defense Forces, under the rubric "The Commander and Modern Combat": "The Bold Decision: Who Will Implement It?"]

[Text] During a tactical exercise with live firing, Lieutenant Colonel A. Stetsenko was faced with a difficult mission. He had to organize cover for the area which would prevent even a single air target from getting through to it. According to intelligence the number might exceed the subunit's combat capabilities. The situation was complicated even more by an acute shortage of time and by "inconvenient" terrain. All of this demanded a thorough assessment of the situation and well-calculated action. And Lieutenant Colonel Stetsenko coped with the mission.

Without going into details, I can say that the decision adopted by Lieutenant Colonel Stetsenko, combat master, is not to be found in the textbooks. It was a bold, I would even say daring, decision. And at first glance, even extremely risky. A closer look would convince one that it was well-founded, however, that in this situation the enemy had to employ precisely that tactical procedure on which Lieutenant Colonel Stetsenko had counted and in accordance with which he organized the defense.

The officer's decision reflected a profound understanding of the combat capabilities of the modern missile system, the level of professional training of the crews, and much more. But this is just a general description, so to speak. Just what lies beyond it?

Modern air defense combat, fast-moving and saturated with air targets, makes special demands of the commander's decision. It must combine a bold plan and reasonable initiative, a knowledge of the enemy and maximum application of the combat features of the weapons, and the professional skills of subordinates. All of the classes in the commander training system, the work performed with modern radio electronic equipment at training sites and centers, and the firing exercises at the range ultimately all focus on teaching the officer to make the most correct decisions in a combat situation.

Unfortunately, proper attention is not given to this matter in all of the units and subunits. Some officers, trusting that electronic computers will perform many of the operations involved in preparing and conducting a battle, believe that the commander only has to select the best alternative suggested by the electronic computer. Well, electronic computers, automatic control systems and other means of automation do in fact perform a great deal of the work in a battle, process information considerably more rapidly, and provide recommendations. One must thoroughly understand the capabilities of this equipment and make full use of it. No machine, however, even the most advanced, is capable of replacing man. Only man can consider all of the subtle differences of a battle and make the most correct, nonstandard decision. A machine is incapable of this.

Let me return to our example. I was alongside Lieutenant Colonel Stetsenko during the battle, and I will say that had he relied entirely on electronic computers, one or two high-flying targets would inevitably have gotten through. It cannot be ruled out that the "enemy" was counting on this when he sent an important high-flying target over a secondary [sector]. The launcher control officer performed competently in that without ignoring the electronic equipment, he distributed the fire based on his own view of the battle.

Lieutenant Colonel Stetsenko's battle plans are always distinguished by boldness of design, a nonstandard approach for assessing the situation, a good understanding and precise consideration of the combat capabilities of the opposing side. How does he achieve this? The officer has a good military background, but he studies tirelessly, adopts progressive techniques and methods for using the equipment in a combat situation, and improves his training as a commander.

The work style of many other officers in the Air Defense Troops also reflects a systematic and analytical approach to the improvement of their professional knowledge and skills.

There is no point in denying the fact, however, that, as I have already stated, we also have commanders who prefer to operate in a routine manner in a combat situation and are not particularly zealous in seeking unconventional plans. And they lose their confidence when the situation becomes complicated. This attitude is contrary to the combat manuals and to the spirit of our time. In the new training year we have particularly persistently combatted manifestations of formalism, passivity and routine performance in the combat training.

Making the correct decision is still only half of the job, however, as they say. How precisely will it be implemented, and by whom? This is a question which cannot be left unanswered when deciding on this or that tactical move, issuing this or that combat order. Lieutenant Colonel Stetsenko had skillful assistants in Major P. Zhuravlev, Captains V. Peretelskiy and O. Prozorovskiy, and other fightingmen in the subunit distinguished by good professional skill and high-caliber combat work. Can the electronic computer really take these "variables" into account? And it was precisely because of them that the commander's plan became flesh and blood, as they say.

Only one conclusion suggests itself: the talented commander's decision requires talented executors, real masters in their work. A fightingman's rating is an indicator of his level of professionalism. The higher it is, the more reliable is the specialist in combat and the broader the range of his combat capabilities. The opposite is also obvious: if the specialists on the combat crew are poorly trained, then the most correct commander's decision can be left hanging in the air, as they say.

The combat crew headed by Captain Ye. Belousov of the Moscow Air Defense District took last place in the competitions. At the same, a test of the officer's personal preparation, which was a part of the competition program, put him into the top four launcher control officers in the Air Defense Troops. Captain Belousov was let down by other members of the crew, who did not demonstrate good skills in operating the equipment. The very first unusual situation to arise when they were fighting the air "enemy" put them out of action, as they say. The fightingmen were unable to implement rapidly and skillfully Captain Belousov's correct but complex decision.

Good training is the foundation for the improvement of professional skill and ratings, and ultimately the guarantee of preparedness to carry out any decision of the commander and to achieve victory in a battle. This fact is unquestionably known to every commander. One frequently encounters situations like the following, however. At the height of the training day, some of the men are policing the grounds, some performing other jobs.

And now, something about an aspect of the combat training which is closely connected with the implementation of the commander's decision. The following sometimes occurs. All of the crew members are highly rated specialists, but the crew performs poorly. What is the matter? It is not enough merely to be a skilled individual performer. One must also sense the elbow of his comrades, so to speak, be able to understand them almost without a word or without a glance in the performance of the functional duties. In short, highly coordinated actions are needed.

The battalion commanded by Lieutenant Colonel V. Faltus found itself in a complex tactical situation in the exercise. The battalion commander, combat master and holder of the Red Star Order, adopted a plan for destroying a low-flying target. The fightingmen destroyed it with the first missile, even though it was flying in a background of heavy interference. Furthermore, at the height of the battle the inspector introduced a hypothetical situation removing one of the specialists from action. Failure appeared to be unavoidable. Thanks to its well-coordinated actions, however, the crew accomplished the combat training mission even under those circumstances. This kind of coordination is an indication of real skill.

Lieutenant Colonel Faltus is considered to be a pedant in the regiment. For him, the combat training plans and the class schedule are an immutable law which he obeys absolutely. And it is no accident that the battalion is an excellent one, known for its discipline and organization. The combat training in the battalion is the core of the military collective's entire life, and

the coordination of the subunits is always closely interlinked with the individual training of the specialists. Every class in the battalion is replete with elements of surprise, and full use is made of the simulation equipment. Maximum pressure and a changing tactical background all motivate the fighting-men to make an all-out effort and develop in the missilemen the creative thinking, unity and responsibility so essential to those who handle the team weapons.

The battle plan is the pinnacle, the apogee of the commander's creative work in combat. When it is original and contains innovative elements, it in great part predetermines the outcome of a battle. It must be based not just on an accurate knowledge of the enemy, however, but also on firm confidence that one possesses combat superiority over the enemy, that the commander's plan will be implemented without fail.

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## AIR/AIR DEFENSE FORCES

### PVO'S 1987 SOCIALIST COMPETITION CHALLENGE

Moscow KRSNAYA ZVEZDA in Russian 9 Dec 86 p 1

[Report: "Reliably Protect the Homeland's Air Borders"; first three paragraphs are KRSNAYA ZVEZDA introduction]

[Text] Fightingmen of the Guards antiaircraft missile three-time order-bearing air defense regiment commanded by Guards Colonel V. Soshko serve successfully and vigilantly perform alert duty. The combat history of this unit began in the awesome year of 1942. Its fightingmen courageously fought the German fascist invaders during the Great Patriotic War. The Guards missilemen sacredly honor and add to the combat traditions of the members of their regiment who fought at the front. For many years in a row they have unvaryingly received excellent evaluations for their tactical exercises with live launchings. Regimental personnel achieved large successes in the improvement of their combat skill and the strengthening of discipline in the past training year. All of the combat training missions were performed with good results, and the socialist commitments were completely fulfilled.

Decisions coming out of the 27th party congress and the June 1986 Plenum of the CPSU Central Committee brought a new surge of strength and energy in the Guardsmen. The fightingmen unanimously approve and support the party's strategic course of accelerated social and economic development for the nation and are struggling to implement its decisions. They intend to greet the 70th anniversary of Great October with large military achievements.

Socialist commitments for the new training year were discussed at a recent personnel meeting in the regiment. Guards Lieutenant Colonel N. Marchenkov, Guards Senior Lieutenant V. Karasev, Guards Warrant Officer V. Yasenchuk, Guards Junior Sergeant Yu. Russkiy, Guards Private V. Dmitrenko and other speakers called upon their fellow servicemen to struggle to improve their military skill, to enhance vigilance and to raise the combat readiness of their unit to a higher level. The Guards missilemen appealed to all fightingmen of the Air Defense Forces to actively enter into the socialist competition to fulfill 27th CPSU Congress decisions and greet the 70th anniversary of Great October in a worthy manner.

Dear comrades!

Combat friends!

Together with the Soviet people, fightingmen of the army and navy are working selflessly to fulfill the historic decisions of the 27th CPSU Congress, which defined the party's course of accelerating the nation's social and economic development, and strengthening the Soviet state's defense capability.

Wholly approving and supporting the CPSU's foreign and domestic policy, fightingmen of our renowned Guards unit are filled with resolve to convert the party's grand designs into the energy of practical action, to make their contribution to the qualitative improvement of the Soviet Armed Forces, to the reliable defense of the homeland's air borders, and to a fitting reception for the 70th anniversary of Great October.

In a situation in which the military-political climate has been markedly aggravated through the fault of imperialism's reactionary forces, in which the USA and its allies are attempting to destroy the existing military parity and take the arms race into space, we see our main mission as one of vigilantly guarding the gains of socialism and persistently perfecting our combat skill.

Firmly guided in our practical work by the party's contemporary demands, we are profoundly aware that preparations for the 70th anniversary of Great October are a practical test of all the military collectives, a check on how the restructuring is actually proceeding and on how profoundly its concepts have been perceived and are being embodied in the end results.

Responding to the concern of the Communist Party and all of the Soviet people for strengthening the combat capability of the Armed Forces of the USSR, we call upon personnel of the Air Defense Forces to support the initiative of fightingmen in the unit of the Strategic Rocket Forces commanded by Lieutenant Colonel N. Ulyanov, and to actively enter into the socialist competition to fulfill 27th CPSU Congress decisions and greet the 70th anniversary of Great October in a worthy manner.

Having thoroughly understood the missions assigned by the USSR Minister of Defense for the new training year, we accept the following socialist commitments:

--to thoroughly and extensively study Marxist-Leninist theory, materials and decisions of the 27th congress and subsequent plenums of the party Central Committee; to develop in ourselves ideological conviction, infinite devotion to the homeland, political vigilance, and an active stance in life; to extensively publicize the revolutionary, combat and labor traditions of our socialist state; to steadfastly follow in all our military affairs, Lenin's behests and the demands set forth in the party Program and at the 27th CPSU Congress with respect to strengthening the nation's defense capability and enhancing the vigilance and combat readiness of the Soviet Armed Forces;

--to be constantly at a high level of combat readiness and vigilantly perform alert duty; to struggle for further coordination of the practical control agencies and the combat crews; to better the norms for combat work by 5-7 percent.

--to ensure good end results in the combat and political training by making the training process more intensive; to prevent indulgences and simplifications in the combat training; to impart real rivalry and militancy to the competition; to achieve good results in all the scheduled combat training tasks and to earn excellent ratings for the live launchings;

--to persistently master the combat equipment and weapons; to have 22 combat masters, 74 percent specialists with a higher rating and 71 percent with a mastery of related specialities; and to have 50 percent of the teams and sections with a higher rating by the end of the year;

--to assess what has been achieved self-critically and demandingly, and to resolutely combat lack of objectivity in assessing the results of the combat training and the competition; to make strict demands of those who perform less than intensely, are satisfied with mediocre results and accept shortcomings; each of us participating in the competition will set an example of industry, discipline and good morality;

--to strive persistently to conserve all types of resources and material, to develop and improve the training base by adopting the achievements of scientific and technological progress, and to extensively involve the personnel in rationalization and invention work; to effect a saving of seven percent in the use of radio electronic and electromechanical equipment, and five percent in the consumption of fuel, lubricants and electrical energy by the end of the year; to collect and turn over to the state 88 tons of scrap metal; to submit at least 60 proposals for improving efficiency;

--to concern ourselves constantly with improving and maintaining in exemplary condition the military camp, the pools, social and cultural facilities, and with the development of subsidiary farming; to take an active part in the competitive review for best unit management and high-quality camp; to have every serviceman work at social and cultural facilities on at least four days-off; to qualify for a prize in the competitive review;

--to improve the mass sports work and the physical conditioning, and to develop in the fightingman a capacity to withstand large physical and psychological loads; to train 81 percent [of the personnel] up to the level of rated sportsmen, and 80 percent up to the level of VSK [military-sports complex] badge-holders; to create an exemplary cultural and sports complex;

--to see that the Communists are in the vanguard of the socialist competition; and they commit themselves to increase their job and political activeness, to set an example of great responsibility, organization and efficiency, and to be achieving only good or excellent results in the combat training by the end of the year; to have 75 percent of them become combat masters or specialists with a higher rating;

--to see that all of the soldiers-and-Komsomol members take an active part in the All-Union patriotic action "We Are Maintaining a Revolutionary Pace" and greet the 20th Komsomol Congress in a worthy manner, that they set an example of conscientious fulfillment of their constitutional duty, the military oath, military regulations and moral standards; that 60 percent of the Komsomol members will become specialists with a higher rating, and 15 people will master combat specialities at the officer/technician level.

The socialist commitments we have accepted represent the energy of our plans. We shall apply all our strength, our knowledge, vital creativity and initiative to transform them into practical deeds on the basis of the restructuring, honorably accomplish the missions assigned by the USSR Minister of Defense for 1987, for the 70th anniversary of the Great October Socialist Revolution, and to earn the title of excellent regiment.

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## AIR/AIR DEFENSE FORCES

### LT GEN KHATYLEV DISCUSSES 1987 TRAINING EFFORTS

Moscow KRASNAYA ZVEZDA in Russian 9 Dec 86 p 1

[Article by Lt Gen Avn P. Khatylev, deputy district commander for combat training: "The First Lessons"; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] The first week of the new training year has ended. Lieutenant General of Aviation P. Khatylev, deputy district commander for combat training, tells how it went in the Moscow Air Defense District.

Preparations for the new training year in the units and subunits took into account the increased demands made on the combat training and focused on intensifying the training and achieving a good end result from every training day and every class. And it needs to be said that in many units the classes were conducted smoothly and in an organized manner, with real combat intensity. One could mention the units in which Guards Lieutenant Colonel I. Teterev, Guards Major A. Berkazov, Major V. Lavrov and others serve as examples of this kind of organization of the training.

What is different about the organization of the training in those military collectives? First of all, the approach taken to the combat training as the most important matter in the life of the unit and subunit. Everything else is, figuratively speaking, of an applied nature. And this is correct. The fact that from the very first day classes have been conducted there at a smooth pace and with combat intensity is a result of this approach to the matter.

It would seem that the lessons from the past training year would have convinced everyone that, due to the increased demands made of the combat training, this is the only possible approach to its organization today. Unfortunately, however, in some places we encountered relapses into the old illnesses: lack of planned coordination, postponement of classes, and inefficient use of the training facilities.

Scheduled simultaneously in the unit in which Officer I. Savelyev serves, for example, were a tactical exercise involving a surface-to-air missile battalion and a double-stage drill of a combat crew directed by the regimental commander himself. On those same days, the chiefs of staff were to conduct a

special tactical exercise with one of the subunits and a comprehensive exercise with duty officers. It is commendable for the plans to have an intensive training pace, but how realistic is it? It turned out that the regimental commander would have to be in two places at once, the chief of staff as well. Furthermore, it was learned that neither of them would be in the regiment on those days: an exercise at higher headquarters was scheduled for that time....

It is not difficult to imagine what the results of these planning errors would have been, had district staff officers not intervened in time.

Implementation of the well-known principle that "the training time is for training" demands that those in charge of the exercises show particular concern for making efficient use of every training minute. Everything is important: the level of the director's personal preparation, the exercise site, and skillful use of the training base. Obliviousness of these truisms inevitably results in low-quality exercises.

Our officers encountered such things in the unit in which Officer N. Gerasimov serves, as an example. How could the training time be effectively utilized there, if the class on safety measures for working with the equipment is conducted... in the Lenin room?

It should be mentioned that many defects in the organization of the training process in that unit were caused by omissions committed during the period of preparations for the new training year: the plan for improving the training facilities was not fulfilled. As a result, some classes which could be conducted on trainers had to be conducted right on the equipment, and this involves unjustified consumption of electric energy, fuel and lubricants. It is essential also to give thought to the economic aspect when organizing the training process.

It is gratifying that none of the personnel were actually taken away from their classes during the week, even though the preconditions for this were to be supervised. In the communication battalion commanded by Lieutenant Colonel Yu. Tomaro, for example, the presence of the personnel in the classes was monitored only as a formality.

In general, the results of the first week of training indicate that personnel of the units and formations are in a militant mood, filled with resolve to successfully fulfill the large socialist commitments accepted in honor of the 70th anniversary of Great October. There are also lessons to be derived from the first classes, however. Although shortcomings detected by officers from the district staff and directorates were corrected immediately, on the spot, we have concluded that demandingness needs to be increased with respect to the quality of the combat training. And the commanders need to be taught more persistently how to organize the training process.

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## AIR/AIR DEFENSE FORCES

### AIR FORCE'S 1987 SOCIALIST COMPETITION CHALLENGE

Moscow KRASNAYA ZVEZDA in Russian 11 Dec 86 p 1

[Article: "Toward the Pinnacles of Combat Skill"; first four paragraphs are KRASNAYA ZVEZDA introduction]

[Text] Personnel of the Guards bomber Red Banner air regiment commanded by Guards Colonel A. Labkovskiy have achieved good results in the air, fire and tactical training. The regiment's combat readiness measures up to the demands made of it.

Personnel of the Guards unit entered the new training year with a feeling of great political enthusiasm and a sense of heightened responsibility for the quality fulfillment of training plans and programs, and exemplary performance of all the missions.

Having discussed the tasks for 1987, the pilots, navigators, engineers, technicians and junior air specialists accepted intensive socialist commitments. At a meeting of regimental personnel Guards Lieutenant Colonel N. Volkov, commander of an excellent squadron, Guards Captain N. Surmin, best efficiency expert in the unit, Guards Major I. Polkovnikov, secretary of the regimental party committee, Guards Senior Lieutenant N. Zaytsev, senior aircraft technician, and other Guardsmen called upon the others to achieve quality performance of the combat training missions and to resolutely put an end to incidents of simplification and routine performance in the combat training.

The airmen appealed to all personnel of the Air Forces to initiate socialist competition with the slogan "We shall fulfill decisions of the 27th CPSU Congress and commemorate the 70th anniversary of Great October with selfless military work!"

Appeal of Personnel of the Guards Bomber Red Banner Air Regiment

Comrade airmen and combat friends!

We fightingmen of the Guards bomber Red Banner air regiment unanimously support and fervently approve the Communist Party's foreign and domestic policy,



and are profoundly aware of the complexity and danger of the current international situation. Reactionary circles of the USA and the NATO bloc are stubbornly continuing their militaristic course and attempting to destroy the strategic parity which has been established and to achieve military superiority over the Soviet Union and the Warsaw Pact.

We regard it as our filial duty to the homeland to implement steadfastly the decisions coming out of the 27th CPSU Congress, to enhance vigilance and combat readiness, and to improve the air, fire and tactical training.

We are continuing the glorious traditions of the Guards regiment and are filled with resolve to make a worthy contribution to the reliable protection of socialism during the 70th anniversary of the Great October Socialist Revolution.

Realistically assessing existing possibilities and reserves, we have decided to actively enter into socialist competition for best results in enhancing the combat readiness in air training. We consider it to be the main thing for us to improve the quality of the training process and bring every class closer to the demands of modern combat. We shall persistently learn how to defeat a powerful and technically outfitted enemy, and how to make the most efficient use of the combat capabilities of the airborne missile system. With this in mind, regimental personnel are accepting the following socialist commitments for the 1987 training year:

—to thoroughly study Lenin's ideological and theoretical legacy, the history of the CPSU, materials and decisions of the 27th party congress and subsequent plenums of the CPSU Central Committee; to actively implement our party's policy and Lenin's concepts with respect to protecting the socialist homeland; to develop in ourselves precise class positions, profound conviction of the correctness of our cause, and the good moral qualities and fighting efficiency of the Soviet fightingman;

--to perform the combat training missions well, day or night, in all kinds of weather; to reduce the time required to make the regiment combat-ready (reduce it by three percent below the authorized time by the opening of the 20th Komsomol Congress, and by five percent by the 70th anniversary of the Great October);

--to achieve good end results from air training of flight crews by intensifying combat training; to bring tactical flight training into the closest possible conformity to actual combat; to earn ratings of "excellent" or "good" for all the tactical flight exercises for the regiment and the squadrons; to have an average rating of 4.6 for combat employment by the end of the training year, 4.7 for air navigation and piloting techniques, and 4.6 for the basic subjects in the commanders' training, and to totally eliminate indulgences, simplifications and exaggeration of evaluations;

—to make creative use of combat experience from the Great Patriotic War; to adopt the best achievements of masters of the bomb and missile strike; to seek new tactical procedures for locating and destroying targets with maximum parameters;

--to achieve effective use of every flight shift, the aircraft pool, the training systems, airfields and ranges for purposes of fulfilling the flight training plan completely and well, especially with respect to the complex kinds of combat employment; to strictly observe the laws governing the flight service; to strive to eliminate preconditions for flight accidents caused by the personnel;

--to improve the engineering and technical and the special training of the airmen; to eliminate violations of the rules for operating the aviation equipment on the ground and in the air; to ensure that it operates reliably; to train 25 percent of the engineering and technical specialists up to the level of master, and 44 percent up to the level of first or second class; to have 53 percent excellent aircraft and 52 percent excellent servicing and maintenance groups by the end of the year;

--to continue improving the training facilities; to develop and adopt 45 proposals for improving efficiency; to strictly observe conservation requirements; to develop in the fightingmen an attitude of thrift toward the use of materiel; to cut consumption of fuel and lubricants by two percent; electric energy by four percent;

--to have two squadrons and technical maintenance units in the regiment, 58 percent of the flight crews and 70 percent of the flights holding the title of "outstanding", and to have 51 percent of the personnel outstanding in the combat and political training by the 70th anniversary of Great October;

--the Communists in the regiment commit themselves to be in the front ranks in the competition, to inspire the military airmen with their personal example to accomplish the combat and political training tasks;

--to initiate competition among the Komsomol members and the young fightingmen to provide a fitting reception for the 20th Komsomol Congress, to fulfill its decisions and make their contribution to the All-Union patriotic action "We are maintaining a revolutionary pace!";

--to see to it that all of the airmen observe communist morality; to make fuller use of the possibilities of competition for developing in the servicemen good morality, organization, aware discipline, intolerance of mismanagement, waste, drunkenness and theft; to strive for unity of words and deeds;

--to have all of the servicemen take an active part in the mass cultural and sports work; to develop 80 percent of the personnel as rated sportsmen or VSK [military sports complex] badge-holders by the end of the year; to strive persistently to make the military camp one of exemplary public order and culture.

Filled with a great sense of love for and pride in our great homeland, we are fully resolved to make a fitting contribution to the strengthening of our valorous Armed Forces, to completely fulfill the socialist commitments accepted and to earn the title of excellent regiment.

We call upon all airmen in the Air Forces to actively enter into the struggle to reach new and higher positions in combat readiness and in the military work for the glory of our beloved homeland, and to greet the 70th anniversary of the Great October in a fitting manner.

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## NAVAL FORCES

### NAVY'S 1987 SOCIALIST COMPETITION CHALLENGE

Moscow KRASNAYA ZVEZDA in Russian 12 Dec 86 p 1

[Article: "Reliably Stand Watch at Sea"; first four paragraphs are KRASNAYA ZVEZDA introduction]

[Text] The crew of the nuclear-powered submarine commanded by Captain 1st Rank V. Nikolayevskiy, Red Banner Pacific Fleet, worked productively this past training year. The submariners successfully accomplished the missions on an ocean cruise and performed all of the combat exercises well.

The Communists on the nuclear-powered submarine set an example in the service and the competition. Their successes for the past training year were rated as excellent or good. Nor are the Komsomol members lagging behind them. They are preparing a fitting reception for the 20th Komsomol Congress.

Profoundly aware of their military duty and striving to make an important contribution to the accomplishment of the missions assigned the Armed Forces at the 27th CPSU Congress, the Pacific Fleet submariners are filled with a desire to tirelessly enhance vigilance and combat readiness, to persistently study the modern combat equipment and weapons, and to improve their combat and political preparation and their naval training. This was clearly demonstrated at a recent meeting of personnel on the nuclear-powered submarine, at which new socialist commitments were discussed and accepted. Speaking at the meeting, Captain 3rd Rank V. Poddubnyy, Captain-Lieutenant A. Tarasov, Senior Lieutenant A. Yatskov, Senior Warrant Officer V. Tikhonov, Seaman V. Suleymanov and others called upon their colleagues to commemorate the 70th anniversary of Great October with military shock labor.

The personnel on the nuclear-powered submarine appealed to all the personnel of the Navy to launch socialist competition in training year 1987 with the slogan: "We shall fulfill decisions of the 27th CPSU Congress and commemorate the 70th anniversary of Great October with selfless military labor!"

An Appeal From the Crew of the Nuclear-Powered Missile Submarine

Dear comrades and friends:

An important event in the history of our homeland and of the entire revolutionary movement, the 70th anniversary of the Great October Socialist Revolution, is approaching. The coming anniversary year will go down in history

as a year of implementation of the intensive plans for social and economic acceleration outlined at the 27th CPSU Congress.

Together with all the Soviet people and fightingmen of the army and navy, we fervently support the party's course toward acceleration and restructuring, the strengthening of the nation's economic and defense capability, and improvement of the Soviet people's welfare.

For us seamen, the restructuring means a sharp turn toward new things in the organization of the combat and political training, and in the struggle for exemplary military discipline and solidarity of the crew, and on this basis, toward further enhancement of the ship's combat readiness.

The achievement of good end results in the combat training and mastery of the complex equipment, missile and torpedo weapons, and new tactical methods of employing them will be the main reference points in the restructuring of our work.

We shall persistently and boldly wage a determined battle against conventionalities and simplification in the combat and political training, against affectation, sham and lack of principle, a struggle to establish efficiency in the work by enhancing the political activeness of the Communists and Komsomol members, of all the fightingmen on the crew.

As we engage in the socialist competition in the new training year, we are concentrating our efforts primarily on those areas which will ensure improvement of the quality of the combat readiness and full utilization of internal reserves for intensifying the training process and improving the effectiveness of the political and military indoctrination. We commit ourselves to work at the intense pace of acceleration, to raise the laggards up to the level of those out front, and to develop initiative, creativity and comradely mutual assistance.

Having weighed our possibilities, we accept the following commitments:

--to focus the main efforts on undeviatingly fulfilling decisions of the 27th CPSU Congress and the demands set by the USSR Minister of Defense with respect to further enhancing vigilance, combat readiness and the quality of the combat and political training; to see that every submariner thoroughly understands the party's program goals and tasks, and ways to achieve them, and the need for a restructuring in the work as the basis for mobilizing internal reserves and possibilities for further improving combat readiness; to reduce the time required to ready the weapons and combat equipment for combat by 7 percent by the 70th anniversary of Great October, to earn excellent ratings for all of the combat training missions, to have 68 percent of the crew outstanding in the training, 78 percent excellent combat stations and sections, and 80 percent excellent departments, and to reaffirm the title of excellent ship;

--to thoroughly study the theoretical legacy of Marx, Engels and Lenin, the history of the CPSU and the multinational Soviet state, to persistently embody in practical deeds Lenin's behests to Soviet fightingmen and the instructions of Comrade M.S. Gorbachev, General Secretary of the CPSU Central Committee,

on matters of defense, to demonstrate unshakable loyalty to our patriotic and international duty, to the revolutionary and combat traditions of the Communist Party, the Soviet people and the Armed Forces;

--to maintain in the crew relations of moral purity, solidarity, naval friendship and comradeship, and to develop mutual demandingness and general intolerance of lack of discipline and irresponsibility;

--to see that the Communists on the ship head the struggle for a restructuring of the military work and the political and indoctrinational work, for the adoption of methodological, technical and tactical innovations, and progressive training methods, and for the establishment of conditions necessary for making full use of the crew's moral potential, and to ensure that they take the avant-garde role in the fulfillment of the commitments accepted;

--to see that the Komsomol members on the crew provide a fitting reception for the 20th Komsomol Congress, earn the right to be photographed next to the Red Banner of the Komsomol Organization of the Soviet Army and Navy, and raise their class rating one level or master a related specialty by the opening of the congress;

--to initiate an extensive effort to publicize technical military knowledge, to persistently adopt the advanced know-how of the master of military affairs, and to have the crew consist of 93 percent specialists with a higher rating by the end of the year;

--to actively develop a spirit of competition and healthy rivalry among the servicemen and the subunits in the combat training, and to regularly conduct competitions for best specialist, best combat station, division and compartment, competitive inspections for exemplary maintenance of weapons and equipment, living quarters and service areas, and a climate of invention and rationalization work, and to submit 16 proposals for improving efficiency;

--to constantly seek and fully utilize existing possibilities for meeting the party's contemporary demands in the struggle for conservation and thrift, and to cut consumption of all types of fuel by five percent below the established norms during the year;

--to see that all the personnel take an active part in the public, mass cultural and sports work, to have 75 percent rated sportsmen or VSK [military-sports complex] badge holders, and to have a permanent amateur performing group.

Combat friends! We believe that the way to achieve this objective is to un-deviatingly follow the course defined at the 27th CPSU Congress. For us, the year of the 70th anniversary of Great October will be a year of intensive improvement of quality indicators in the combat training, improvement of military skill, further unification of the crew, and reliable defense of the beloved homeland.

We call upon personnel of the Navy to support our initiative and initiate a struggle unconditionally to fulfill decisions coming out of the 27th CPSU Congress and to provide a fitting reception for the 70th anniversary of Great October.

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## NAVAL FORCES

R ADM A.U. ABBASOV MADE HERO OF SOVIET UNION

Moscow KRASNAYA ZVEZDA in Russian 14 Dec 86 p 1

[Article by R Adm A. Abbasov, Hero of the Soviet Union: "The Commander's Order"; first paragraph KRASNAYA ZVEZDA introduction]

[Text] Rear Admiral Abdulikhat Umarovich Abbasov is a graduate of the Higher Naval School of Submarine Navigation imeni Lenin Komsomol. He has served on submarines more than a quarter of a century. He was commander of a mine and torpedo division; mate and then executive officer on a diesel-electric submarine; executive officer and then commander of a nuclear-powered submarine. To Abdulikhat Umarovich goes a great deal of credit for testing the combat features of the nuclear-powered submarine and improving the organization of the service on it. He was awarded the title Hero of the Soviet Union for courage and valor demonstrated in the process.

"Yesterday you were people of diverse occupations.... As of today you are fighters and junior commanders.... And I am your commander. I order; you obey. I dictate my will; you carry it out.... Each of you will do everything I order you to do. Yesterday you could argue with a chief; yesterday you had the right to consider whether he had said the right thing, whether he had acted legally. As of today the homeland takes that right away from you. As of today you have one law: the commander's order. The homeland has entrusted me with issuing orders and has commanded you to carry them out.... Military order is rigorous, but this is what sustains the army...."

Many times during my service in the Navy, I was reminded of these words, uttered by one of the heroes in A. Bek's book "Volokolamskoye shosse" [Volokolamsk Highway]. This ordinarily occurred in a complicated situation, when the execution of an order was complicated by some sort of complex circumstances. The knowledge that behind the order stood the command of the homeland and the will of the Soviet people helped me to mobilize my strengths and find a solution in what appeared to be a hopeless situation.

I recall the following situation when I was serving on a diesel submarine. It occurred during a combat training cruise in one of the southern seas. Proceeding on our route, we suddenly found ourselves in an area of operations of NATO surface ships. Our order was to maintain complete secrecy

on the cruise. There was only one thing to do in the situation: settle onto the bottom and freeze, as they say. This meant turning off all of the machinery producing a perceptible noise. The water was not very deep in that area, and the temperature of the water was therefore fairly high. The so-called closed volume effect soon began to make itself felt: the temperature in the compartments began to rise. Quite frankly, this is not an easy test for a crew. Time passed, but the NATO ships did not leave the area. An emergency situation developed. The commander visited the compartments several times and talked with the Communists and Komsomol members. Difficult as it was, however, all of them were filled with resolve to carry out the order to the end. No one had any doubt that this was the only thing to do.

This kind of understanding of the sacredness and inexorability of an order does not come about on its own, of course. It is a result of painstaking indoctrinational work performed by commanders, political workers, party and Komsomol activists, and also--a matter of no little importance--of determined self-indoctrination on the part of the servicemen. I shall cite an example. Any commander can probably recall many like it.

Seaman V. Loginov joined our crew together with some other new replacements. It was clear from the very first days that he was not accustomed to subordination, that discipline was a burden for him. Conceited and obstinate, this seaman was absolutely unable to recognize his main duty: to subordinate himself absolutely not just to the officers and warrant officers, but to the junior commanders as well. Probably all of the regulation ways were employed for indoctrinating him, but without result. Loginov even seemed to be proud of the fact that he was receiving so much attention. It is difficult to expect any changes with that kind of attitude.

We were preparing for a long ocean cruise at the time. The commander personally talked with each seaman. He told Loginov that it would apparently be necessary to transfer him ashore, since the disciplinary demands on a cruise are great and it is vitally important to the crew to make certain that discipline is at the necessary level on every team. After that, the seaman began to change right before our eyes. I think that in this case the seaman's feelings were finally affected, that the process of self-assessment and self-indoctrination was "awakened" in him. A desire to go on the cruise and a fear of being transferred ashore and taken away from the crew changed the seaman's attitude. He began to exercise self-control and to direct his will toward carrying out every order with a willingness, with an inner drive to respond in the best possible way to the words of commanders and chiefs.

Regard for an order as something absolutely essential, a regard which comes through the mind and the heart, must be a part of every fightingman. It is especially important in our time, however--among other things, because of the increased provision of our Armed Forces with electronic equipment. Today, the chief and his subordinates are frequently linked in a combat training situation only by technical means, and this means that there are special

aspects to the execution of a commander's order. A signal light comes on by an operator. This is a command, an order. It has to be carried out unconditionally and right on time.

Take the modern nuclear-powered submarine, for example. Every crew member deals with complex instruments, whose readings, I would say, also constitute an order. One needs to become accustomed to seeing behind these instruments, arrows and signal lights, one's commander, his demanding look, his confidence that the order will be carried out precisely and rapidly. It is sometimes difficult to verify the execution of an electronic order: a seaman can "hide" behind the justification that he "did not notice it," or claim that the "enemy" interfered. It all depends upon the subordinate's honor, his aware attitude toward discipline, his profound understanding of the sacredness of an order. There can be serious problems with any other approach.

When I wrote this, I recalled the following incident....

We were carrying out a combat training mission at sea. During radio contact with shore, information was supposed to be received for taking subsequent action. The radio operator did not perform his job precisely, as a result of which he missed the first part of the radiogram and received only the last part. He did not inform the commander of his little blunder, but acted as though nothing had happened. The ship did not fully carry out its combat training mission as a result, for which the crew's evaluation was lowered.

I know from my service experience that whenever any sort of hitch or trouble arises, the cause should be sought in a violation of an order, instructions, regulations or a manual. Everything is specified in the army and navy; everything is defined and set forth in various regulations, and their precise fulfillment guarantees success in the service and the training. And if creativity, initiative and exceptional selflessness are demonstrated in the process, then one can even anticipate military valor.

The marvelous military saying that "it is only a single step from discipline to heroism" was confirmed by thousands of brilliant examples during the Great Patriotic War. It has its vital embodiment also in the everyday military life of peace time. I am closely acquainted with many Heroes of the Soviet Union who were awarded the title in peace time. All of them, representing various services and branches of troops, are exceptionally disciplined and responsible people for whom an order from command is absolutely sacred.

During my years as a young officer, I had the good fortune to serve on a submarine commanded by Captain 2nd Rank V. Berezovskiy, with Captain 2nd Rank Yu. Padorin as his deputy for political affairs. One was struck by these men's day-to-day combination of irreproachable efficiency and unbridled creative quest. This combination is a natural and regular thing for the real military man, selfless and loyal to duty. The creativity and

initiative of Vadim Leonidovich Berezovskiy and Yuriy Ivanovich Padorin were brilliantly manifested in their desire to carry out orders from command in the best possible manner. They succeeded in establishing such a climate also in the crew. This is shown by the fact that Berezovskiy and Padorin were subsequently awarded the title Hero of the Soviet Union. Both of them became admirals, and most of the crew members received state awards for courage and valor in the performance of their military duty.

Yes, the military man's attitude toward orders in great part determines his attitude toward the service, toward his military duty. It grows out of a great sense of patriotism, ideological conviction, devotion to the revolutionary cause, and loyalty to the oath. We hear the voice of the homeland in every word of an order from the commander, and this means that for the Soviet fightingman there are no obstacles which could prevent him from executing it in the best possible manner.

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## MILITARY EDUCATIONAL FACILITIES

### ALCOHOL PROBLEM REMAINS AT FRUNZE R-R TROOPS SCHOOL

Moscow KRASNAYA ZVEZDA in Russian 11 Dec 86 p 2

[Report by Col A. Yurkin, KRASNAYA ZVEZDA correspondent: "The Semaphore Was Down, or Why Does the Military School not have Regulation Order?"]

[Text] I once observed the following scene at a railway station lost in the taiga. Sparks flew from beneath its wheels, and there was the smell of burning metal, but the dark hulk of the locomotive, wrapped in steam and smoke, was unable to budge the string of heavy cars. That seemed strange: the track was clear, the route had been assigned, and the fly-wheels of the steam engine were doing a good job of transmitting the energy from the whistling steam to the wheels, but there was no movement, no acceleration.

At the Leningrad Higher School of Railroad Troops and Military Communications imeni M.V. Frunze, I recalled the steam engine with its skidding wheels. There was a reason. The work performed to strengthen military discipline at that school was also spinning its wheels. Workers on the commandant's staff at the Leningrad Garrison spoke of this. It was also borne out by statistics on violations of regulations governing conduct in the city by officers, warrant officers and cadets at the school. For example, three times more servicemen from the school were detained by the Leningrad commandant's office in October than in October of last year. And these were not just cadets, but officers and warrant officers as well. What were they arrested for? Many things, including sloppy appearance and other infractions of military discipline. I was told at the commandant's office, however, that still-existing instances of consumption of alcoholic beverages especially stood out. But A. Karpukhin was arrested by a patrol for improper conduct while on leave in the city in February of this year, for example, and arrested for consumption of alcoholic beverages in March.

Certain other servicemen from the school visited the commandant's office after him. They were all arrested for consuming alcoholic beverages and infractions of military order resulting from this. Four were arrested in September, for example, including Major A. Kalinovskiy. This officer's face was a familiar one at the commandant's office, one might say. The Communists issued a party penalty to Officer Kalinovskiy for drinking with subordinates and other infractions.

"Kalinovskiy should have been expelled from the party for his infractions. We felt sorry for him, though," Lieutenant Colonel M. Barysh, secretary of the party organization, admitted.

What was the result of this pity? Six months did not go by before Kalinovskiy once again committed a gross infraction of military order. Proceedings again were instituted against him. The investigation was assigned to Major Ye. Rakov. He proposed that Kalinovskiy be given extreme punishment. At this point it was learned that the penalty previously issued to him by the party organization had not gone into the Communist's record.

When I inquired in the school's political section why Kalinovskiy's recent penalty had not been recorded, Colonel V. Baklanov, secretary of the party commission, explained:

"It should not be in his records. We rescinded the decision adopted at the party meeting."

The party commission has the authority to rescind a decision on punishment for a Communist or to alter the penalty, of course. This step should have been weighed and justified, however. In this case, the party commission obviously took a liberal approach to the matter and did not consider the opinion of Communists in the party organization, who knew Kalinovskiy well, knew his conduct and his infractions. Furthermore, when it rescinded the party organization's decision, the party commission did not even consider it necessary to inform the Communists of this.

The liberalism did not help matters, of course. Some time later Kalinovskiy once again ended up at the commandant's office. I was told that this time he would be severely punished. But will an obstacle not be raised, as it was in the previous case?

On 16 January of this year, a KRASNAYA ZVEZDA report with the title "The Good Situation Did Not Last Long" told how Officer V. Severyukhin, a senior instructor, set out on official business for the school's training center, mistook a liquor store for the railway ticket-office, and was soon delivered to the commandant's office in a state of intoxication. In his reply to the editorial office, Major General B. Koryakov, chief of the school, reported that a severe penalty had been imposed on the guilty man and that the question of whether he should remain at the school was being considered. It was also reported that Communist Severyukhin had been brought to party accountability.

Just what actually happened? Officer Severyukhin still serves at the school, giving lectures. I was told that they had taken pity on him in the interest of the work: he has a candidate's degree plus experience in the field. This kind of "pity" costs very dearly.

Senior Lieutenant A. Goncharenko was also among those arrested by patrols, for failing to salute. I was told at the commandant's office that when the attempt was made to arrest him, he had scuffled with the patrol leader. It

therefore seemed strange to hear from certain senior officers at the school, justifications for Goncharenko's conduct: he was under a lot of pressure, they said, was very involved in his work, and therefore had out of distraction not noticed the patrol on the street. Strange logic, is it not? It turned out that the reason for the liberalism shown for Goncharenko lay elsewhere, however: he has an influential dad. People at the school did not want to ruin relations with him, with Goncharenko senior, and therefore forgave the son his transgressions of conduct.

It is not just a matter of punishment, of course. The main thing is that the struggle for discipline, for good conduct on the part of officers and cadets is not conducted on a daily basis there, and it lacks purposefulness and specificity. For example, people at the school believe that military discipline should be strengthened but that as long as there are people, there will be infractions. And since this is the case, what is the reason for alarm? Such a position obviously requires no comment.

At service conferences and party meetings at the school, people frequently talk a lot about the struggle for good conduct on the part of the officers and cadets. Useful and concrete proposals are also submitted. Unfortunately, they are not always implemented with the necessary persistence.

Some time back, it was decided there to make a serious effort to eliminate the evil of smoking. A slogan was born: make it a nonsmoking VUZ. It was made a part of the duties of individuals on the daily duty detail of the cadet subunits to enforce antismoking rules everywhere on the grounds. Places once designated for smoking in accordance with regulations were eliminated. Penalties were even imposed upon people addicted to smoking. As an exception, however, smokers were permitted to assemble around trash cans placed in a square with a memorial to cadets who died in the war. The smokers themselves soon realized that this was no place to come with a cigarette in one's mouth, however.

People at the school did not think about the fact that the smoking problem cannot be solved with bans alone. They could have invited psychologists, medical experts, athletes and cultural figures to talk with the personnel. The city has extremely good possibilities for conducting such work.

I have frequently seen officers-and-instructors smoking in front of the cadets at the school. A minor thing? Not at all. It is difficult to have irreproachable conduct on the part of the cadets unless the officers-and-instructors set an example.

...Once again, I recalled that skidding steam engine with the signal to go. And the senior engineer's answer when I asked why steam engines spin their wheels.

"Why because every job has to be performed with soul and mind. Even metal will not accept cold hands and an indifferent heart...."

Precisely put.



Steam engines are a matter of history. Unfortunately, old and obsolete methods of working with people are not.

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END